LAB MANUAL

MULTIMEDIA LAB
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SYLLABUS

1. Write a program to justify a text entered by the user on both left and right hand side. For example, the text “An architect may have a graphics program to draw an entire building but be interested in only ground floor”, can be justified in 30 columns. An architect may have a graphics program to draw an entire building but be interested in ground floor.

2. Study the notes of a piano and stimulate them using the keyboard and store them in file.

3. Write a program to read a paragraph and store it to a file name suggested by the author.

4. Devise a routine to produce the animation effect of a square transforming to a triangle and then to a circle.

5. Write a program to show a bitmap image on your computer screen.

6. Create a web page for a clothing company which contains all the details of that company and at least five links to other web pages.

7. Write a program by which we can split mpeg video into smaller pieces for the purpose of sending it over the web or by small capacity floppy diskettes and then joining them at the destination.

8. Write a program to simulate the game of pool table.

9. Write a program to simulate the game mine sweeper.

10. Write a program to play “wave” or “midi” format sound files.
RATIONAL BEHIND THE MULTIMEDIA LAB

The main reason behind organizing this lab is that

1. Student should known about the multimedia software and hardware tools and also they can interact with multimedia practically.

2. There are so many software tools of multimedia like photoshop, flash, dreamweaver so we organize this lab because students can practically understands these tools.

3. Students can create websites what they want from any multimedia software tools.

4. Students can make games by using multimedia concepts.

5. There are so many application of multimedia in various fields like in education, in schools, in business, in communication. So students by performing in this lab can make their future in one of field.

6. Multimedia is supportive for informal learning of science and technology.

7. Multimedia provide new platform document.

8. Multimedia provide real world experiences to students.
SOFTWARE AND HARDWARE REQUIREMENTS

HARDWARE REQUIREMENTS FOR SERVER:

PROCESSOR: P-IV
RAM: 256MB
HDD: 40GB
SPEED: 2.4GHZ

SOFTWARE REQUIREMENTS:

OPERATING SYSTEM: WINDOWS 2003, WINDOWS XP
Software tools: FLASH, PHOTOSHOP, DREAMWEAVER, C++
LIST OF EXPERIMENTS:

Experiment: 1

**AIM:** To study MULTIMEDIA HARDWARE system:

a) INPUT DEVICES
b) OUTPUT DEVICES
c) COMMUNICATION DEVICES

**REQUIREMENTS:** Floppy Disc, Hard Disc, DVD, CD Rom, Input devices like Track Ball, Touch Screen, Mice, Flat Bed, Digital Camera, Output devices like Amplifier speaker, monitor, projector, Printer.

**THEORY:**

**INPUT DEVICES:**

A great variety or input devices - from the familiar keyboard and handy mouse to touch screen and voice recognition setups can be used for development and delivery or a multimedia project.

1) **KEYBOARD:**

A keyboard is the most common method of interaction with a Computer. Keyboards provide various tactile responses and have variously layout depending upon your Computer system and keyboard - model. Keyboard is typically rated at least 50 million cycles.

The most common keyboard for PCs is the 1011 style, although many styles are available with one or more special keys LED’s.
2) **MICE:**

A mouse is the standard tool for interacting with a graphical user interface (GUI). All Macintosh computers require a mouse; on PCs, mouse are not required but recommended. The buttons on the mouse provide additional user input, such as pointing and double clicking to open a document.

3) **TRACK BALL:**

Track ball are similar to mice except that the cursor is moved by using one or more fingers to roll across the top of the ball. The track ball does not need the flat space required by a mouse. Track ball have at least two buttons; one for the user to click, and the other to provide the press and hold condition necessary for selecting & dragging operation.

4) **TOUCHSCREEN:**

Touch screens are monitors that usually have a textured coating across the glass face. This coating is sensitive to pressure and register the location of the user’s finger when it touches the screen. The touch mate system, which has no coating, actually measures the pitch roll, and yaw rotation of the monitor when pressed by finger, and determine how much force exerted and the location where the force was applied.

5) **MAGNETIC CARD ENCODERS AND READERS:**

Magnetic card setups are useful when you need an interface for a data-base application or multimedia project that tracks users. You need both card encoder and a card reader for this type of interface. The encoder connects to the computer at the serial port and transfer information to magnetic strip of tape on the back of the card.
6) FLAT-BED SCANNERS:

A scanner may be the most useful piece of equipment you will use in the course of producing a multimedia project. There are flat bed scanner and handheld scanners. Most commonly available are gray-scale and color flat-bed scanners that provide a resolution of 300 or 600 dots per inch. Professional graphics houses may use even higher resolution unit.

7) OPTICAL CHARACTER RECOGNITION (OCR) DEVICES:

OCR software, such as omni page from cacre or perceive from ocron, to convert printed matter to ASCII text files in our computer. We can also convert paper document into a word processing document on our computer without retyping or rekeying.

An OCR terminal can be of use to multimedia developer because it recognizes not only printed characters but also handwriting.

8) INFRARED REMOTES:

An infrared remote unit lets a user interact with our project while we are freely moving about. Remotes work like mice and trackballs, except they use infrared light to direct the cursor and require no cables to communicate. Remote mice work well for a lecture or other presentation in an auditorium or similar environment, when the speaker needs to move around the room.

9) VOICE RECOGNITION SYSTEM:

Voice recognition system facilitates hands free interaction with your project. These system usually provide a unidirectional cardiod, noise canceling microphone that automatically filters out background noise. Most voice recognition system currently available can trigger common events such as Save, Quit, Open, Print etc. The Macintosh A V and Power Macintosh computer include voice recognition capability and add on sound board such as the Sound blaster or Diamond Sonic Sound and other provide this features for PCs.
10) **DIGITAL CAMERA:**

Digital Camera use the same technology i.e. CCD as video camera uses. They capture the still images of a given no. of pixels and the images are stored in camera's memory to be uploaded later to a computer. The higher the mega pixel rating, the higher the resolution of camera. Images are uploaded from the camera's memory using a serial, parallel cable.

b) **OUTPUT HARDWARE:**

Presentation or the audio and the visual components or our multimedia project requires hardware that may or may not be included with the computer itself- speakers, amplifiers, monitor, motion video devices and capable storage devices. There is no greater test of benefit of good output hardware than to feed the audio output of your computer into an external amplifier.

1) **AUDIO DEVICES:**

All Machintosh are equipped with an internal speaker and a dedicated sound chip and they are capable of audio output without additional hardware and/or software. To take advantage of built in stereo sound, external speakers are required. Digitizing sound on your Machintosh requires an external microphone and sound editing/recording software such as Sound edit 16 from Macromedia, Sound Forge.

2) **AMPLIFIERS AND SPEAKERS:**

Often the speakers we use during a project development will not be adequate for development of multimedia project. Speakers with built in amplifier are important when our project will be presented to a large audience.

3) **MONITORS:**

The monitors we need for development of multimedia projects depend on the type of application we are creating. A wide variety of monitors are
available for both Machintosh and PCs. High-end, large screen graphics monitors and LCD panels are available for both, and they are expensive.

Serious multimedia developers will often attach more than one monitor to their computers, using add-on graphics boards. This is because many authoring systems allow us to work with several open windows at a time so we can dedicate one monitor to viewing the work we are creating or designing and can perform various editing tasks in windows on other monitors that do not block the view of work.

4) VIDEO DEVICES:

Message medium has the visual impact of video with a video digitizing board installed in computer, can display a television picture on monitor. Some boards include frame-grabber features for capturing the images and turning it into a color bitmap, which can be saved as a PICT or TIFF file and then used as a part of a graphics or a background project.

5) PROJECTORS:

When we need to show material to more viewers that can huddle around a computer monitor, we will need to project it onto a large screen or even a white painted wall. Cathoda-ray tube projectors, liquid crystal display (LCD) panel attached to an overhead projector, stand alone LCD projectors, and light-valve projectors are available to splash work onto big screen surfaces.

6) PRINTERS:

With the advent of reasonably priced color printers, hard copy output has entered the multimedia scene. From storyboards to presentation to production of collateral marketing material, color printers have become an important part of the multimedia development environment. Color helps clarify concept, improve understanding and retention or information, and organize complex data. Xerox offers both solid ink and laser options.

c) COMMUNICATION DEVICES: -
Many multimedia applications are developed in workgroups comprising
instructional designers, writers, graphics artists, programmers, and musicians
located in the same office space or building. The workgroup member's
computers typically are connected on a local area network (LAN) the client's
computers, however, may be thousand miles distant, requiring other methods
of good communication.

In the workplace use quality equipment and software for your
communication setup. The cost in both the time and money of stable and fast
networking will be returned to you.

1) MODEMS:

Modems can be connected to your computer externally at the serial
port or internally as a separate board. Internal modems often include fax
capability. Be sure that the modem is Hayes compatible. Hayes AT
standard command set allows us to work with most software
communication packages.

Modem speed, measured in baud, is the most important
consideration. Because the multimedia files that contain the graphics, audio
resources, video samples and progressive version of the project are usually
large and in many cases we need to move as much data in short period of
time. Compression saves significant transmission time and money,
especially over long distance.

2) ISDN:

For higher transmission speed, we will need to use Integrated
Service Digital Network (ISDN), switched -56, T1, T3, DSL, ATM etc.
ISDN lines are popular because of their fast 128 kbps data transfer rate- four
to five times faster than the more common 28.8 kbps analog modem. ISDN
lines are important for Internet accessing, Networking and audio and video
conferencing. They are more expensive than the convention analog lines, so
analyze your costs and benefits carefully before upgrading to ISDN. Newer
and faster Digital Subscriber Line (DSL) technology using copper lines and
promoted by the telephone companies may overtake ISDN.

3) CABLE MODEM:

Cable modems usually send and receive data symmetrically -they receive
more (faster) than they send. In the downstream direction from provider to
user, the data is modulated and placed on a common 6 Mhz television
carrier, somewhere between 42 MHz & 750 MHz. The upper stream channel, or reverse path, from user to provider is more difficult to engineer because cable is more noisy environment with interference from HAM radio, CB radio, home appliances, loose connections etc.
AIM: To study the Multimedia BASIC SOFTWARE TOOLS.

REQUIREMENTS: Basic software tools.

THEORY:

a) Text editing and Word processing tools: - A word processor is usually the first software tool computer users learns. From letter invoice and story boards to project content word processors may also be our most often used tool, as we design or build a multimedia project. Word processor such as Microsoft Word and Word Perfect are powerful that includes spell checkers, table formatters, templates for letters, resume purchase orders and other common documents. In many word processor we can actually embed multimedia elements such as sound, images and video etc.

b) OCR software network: - With optical character recognition (OCR) software, a flat-bed scanner and our computer, we can save many hours of rekeying printed words, and get the job done faster and more accurately than roomful of typists. OCR software turns bitmapped characters into electronically recognizable ASCII text. A scanner is typically used to create the bitmap. Then the software breaks the bitmap into chunks according to whether it contains text or graphics by examining the texture and density of area of the bitmap and by detecting edges. The text areas are then converted into ASCII character using probability and expert system algorithms.

c) Painting and Drawing tools: - Painting and drawing tools as well as 3D modelers, are perhaps the most important items in your toolkit because of all multimedia elements, the graphical impact of our project will likely have the greatest influence on the end user. Painting software such as Corel draw, free hand is dedicated to producing vector based line art easily printed to paper at high resolution.
d) 3D modeling and animation tools: - With 3D modeling software, objects rendered in perspective appear more realistic. We can create stunning scenes and wander through them by choosing just the right lighting and perspective for our final rendered image. Powerful modeling packages such as Infini-D, Auto Desk, Strata Vision’s, secular logo motion, wavefront, aids soft images. Important for multimedia developers, many 3D modeling applications also include export features enabling us to save a moving view or journey through our scenes as a quick time or AVI animation file. Each rendered 3D image takes from a few seconds to few hours to complete, depending upon the complexity of the drawing and the number of drawn objects included in it. A good 3D modeling tool should include the following features:

   i. Ability to drag and drop primitive shapes into a scene.

   ii. Lathe and extrude features.

   iii. Color and texture mapping.

   iv. Ability to create and sculpt organic objects from scratch with Bezier spline drawing tools.

   v. Unlimited cameras with focal length.

e) Image editing tools: - Image editing applications are specialized and powerful tools for enhancing and retouching existing bit-mapped images. These applications also provide many of the features and tools of painting and drawing programs and can be used to create images from scratch as well as images digitized from scanners, video frame grabbers, digital camera clip art files or original artwork files created with painting or drawing package.

f) Animation: - Video and digital movie tools: today the most widely used tool for creating multimedia animations for Macintosh and Windows environment is Macromedia Director. Animations and digitized video movies are sequences of bit-mapped graphics scene, rapidly played back. Most authoring tools adopt either a frame or object oriented approach to animation, but rarely both. Moviemaking tools typically take advantage of quick time for Macintosh and Windows and Microsoft video for Windows technology and let you create, edit and present digitized motion video segments, usually a small window in your project. To make a
movie from video, you need special hardware to convert the analog video
signal into digital data movie making tool such as Premer, videoshop, media
studio pro and let you edit and assemble video clips captured from camera,
tape and other digitized audio or midi files.

Sound editing tools: - System sounds are shipped with both Machintosh
and window system, and they are available as soon as we install the
operating system. System sounds and beeps are used to indicate an error,
warning or special user activity. Using sound editing software we can
make our own sound effects. We need software for editing digital sounds.
Although we can usually incorporate MIDI sound files in our multimedia
project without learning any special skill, using editing tool to make our
own MIDI file requires that we understand the way music is sequenced,
stored and published. We need to know about tempos, clips, notations
and instruments. And we will need a MIDI synthesizer or device
connected to our computer. Many MIDI applications provide both
sequencing and notation capabilities, and some let you edit both digital
audio and MIDI within the same application.
Experiment: 3

A PROGRAM TO VIEW A BMP FILE USING C OR C++
LANGUAGE:-

ALGORITHM:

1. START

2. DETECT THE GRAPHS AND ALSO INITIALIZE THE GRAPHICS.

3. OPEN THE BMP FILE IF AVAILABLE AND SET ITS GRAPHICS.

4. APPLY FOR SOME LOOPS FOR GETTING THE BMP FILE YOU WANT TO HAVE.

5. COMPILe THE PROGRAM AND VIEW THE RESULT OF THE FILE.

6. STOP.
#include<stdio.h>
#include<conio.h>
#include<graphics.h>

void main()
FILE *p;
int i;
int gd=DETECT,gm,x=0,y=480;
int g;
char c;
initgraph(&gd,&gm," ");
p=fopen("F4.bmp","r");
if(p==NULL)
printf("file not found");
else
for(i=0;i<=436;i++)
fscanf(p="%c",&c);
while(fscanf(p="%c",&c)!=EOF)
{
 i=(int)c;
 x++;
{
 if (x>=640)
 { 
 x=0;
 y--; 
 }
 putpixel(x,y,i);
 }
}
A PROGRAM TO PRODUCE ANIMATION EFFECT OF TRIANGLE TRANSFORM INTO SQUARE AND THEN INTO CIRCLE:

ALGORITHM:

1. START
2. INITIALIZE THE GRAPHICS.
3. SET THE COLOUR OF THE TRIANGLE.
4. DRAW THE POLYNOMIAL FROM THE TRIANGLE.
5. SET ITS COLOUR AND THEN TRANSFORM WHOLE INTO A CIRCLE AND FILL IN SOME COLOURS.
6. STOP.
SOURCE CODE:

#include<stdio.h>
#include<conio.h>
#include<graphics.h>

void main()
{
    int gd=DETECT,gm,poly[8],c;
    initgraph(&gd,&gm,"");
    poly[0]=250;
    poly[1]=200;
    poly[2]=200;
    poly[3]=300;
    poly[4]=300;
    poly[5]=300;
    poly[6]=250;
    poly[7]=200;
    setcolor(6);
    setfillstyle(SOLID_FILL,11);
    fillpoly(4,poly);
    getch();
    for(c=1;c<=50;c++)
    {
        poly[0]--;
        poly[6]++;
    }
drawpoly(4,poly);
delay(100);
}
getch();
for(c=1;c<=25;c++)
{
    setcolor(6);
    circle(250,250,75-c);
    floodfill(1,1,10);
    delay(9);
}
getch();
}
Experiment:5

**STUDY ABOUT THE MORPHING:-**

Morphing is a popular effect in which one image transforms into another. In morphing, the warping of one still or moving image into another takes place. This is rather like twinning in that you define the start image and the end image but the two images are completely different. The software works out a sequence of steps so that the first image appears to change gradually into the second object. In morphing, setting keypoints is crucial for a smooth transition between two images.

Morphing automatically animates the change of one image into another as a special effect. It is the wrapping of one still or moving image into another.

Some products that offer morphing features are Black Belt’s Easy Morph and Winimages. Human software Squizz, Valis Group Flo, Metaflo, and Movieflo.

The morphed images were built at a rate of 8 frames per second with each transition taking a total of 4 seconds and the number of keypoints was held to a minimum to shorten rendering time. The point you set in the start image will move to the corresponding point in the end image. This is important for things like eyes and noses which you want to end up in about the same place after the transition. The more keypoints the smoother the morph.
MORPHING USING ADOBE PHOTOSHOP:-
Experiment: 6

STUDY ABOUT THE HTML (HYPER TEXT MARKUP LANGUAGE)

Structure

1.0 Basics of HTML
   1.1 How to create HTML document
   1.2 Steps for creating simple HTML document
   1.3 Exercises for lab practice

1.0 BASICS OF HTML

The Web pages or materials in the form of hypermedia documents accessed through the Internet, can be located anywhere in the world.

No matter where they are originated, most of the web documents are created using Hypertext Markup Language (HTML). HTML is powerful authoring language and found in different versions like HTML 4.2, HTML 4.0, HTML 3.2, HTML 3.0 and HTML 2.

HTML element can be used to define document structure & format, HTML element is the inclusive region defined by either a single tag or a pair of tags. A tags is a string in the language surrounded by a less than (<) and a greater than (>) sign. A opening tag does not begin with a slash (/). An ending or closing tag is a string that begins with a slash (/).
HTML documents format textual information with embedded markup tags that provide style and structure information. Whole document in HTML is surrounded by <HTML> and </HTML>.

### 1.2 HOW TO CREATE HTML DOCUMENT

HTML document can be created using any HTML editor and text editor like notepad etc.

### 1.3 STEPS FOR CREATING A SIMPLE HTML PROGRAM

1. Go to **Start -> Programs->Accessories->Notepad.**
2. Begin with a document type tag and an <HTML> opening tag. Enter the following line in your doc.

   <HTML>

3. Indicate that you are beginning the head element of document by issuing the <HEAD> opening tag. If a <HEAD> element is included, it must appear within an <HTML> element. The following line should appear next in your document:

   <HEAD>

4. The <TITLE> element is used to indicate the title of an HTML document. <TITLE> tags are placed within the head component of a document and the title is placed between the opening and closing <TITLE> tags. Add this <TITLE> element to your document.

   <TITLE>My First Page</TITLE>

5. To end the head area issue a <HEAD> closing tag.

   </HEAD>

   Thus the <HEAD> element is nested within the <HTML> element.

6. At this point the body of the document is developed. A <BODY> opening tag indicates that this point has been reached. Enter the following line.

   <BODY>
7. In this case, the body of document contains a simple text statement for now, add the following statement in your file:

   **Hello World !**

8. A */BODY* closing tag marks the end of the */BODY* element. Similar to the Head element, the */BODY* element is also completely nested within the */HTML* element. To end the */BODY* element, issue the closing tag in your document.

   */BODY*

9. Finally, terminate the */HTML* tag with */HTML* as shown below:

```html
<html>
<head>
<title>My First Page</title>
</head>
<body>
Hello World !
</body>
</html>
```

10. Save your document as mypage.html
11. To view the document open the .html document in the browser.
Session 4: Tags in HTML

Exercise:

1. Create a web Page using href tag having the attribute alink, vlink etc.
2. Create a web page, when user clicks on the link it should go to the bottom of the page.
3. Write a HTML code to create a web page of pink color and display moving message in red color.

Session 5: Tags in HTML

Exercise:

1. Create a web page, showing an ordered list of name of your five friends.
2. Create a HTML document containing a nested list showing the content page of any book
3. Create a web page, showing an unordered list of name of your five friends.

Session 6: Tags in HTML

Exercise:

1. Create a web page which should contain a table having two rows and two columns.
2. fill in the data in the table created by you in question 1.
3. create the following table in HTML with Dummy Data

<table>
<thead>
<tr>
<th>Name of train</th>
<th>Place</th>
<th>Destination</th>
<th>Train No.</th>
<th>Time Arrival</th>
<th>Time Departure</th>
<th>Fair</th>
</tr>
</thead>
</table>

Session 7: Tags in HTML

```
Frame1      Frame2
```

2. Create a web page which should generate following output:

```
Frame1
 Frame2
  Frame3
```

3. Create a web page having two frames one containing lines and another with contents of the link. When link is clicked appropriate contents should be displayed on Frame 2.

Session 9: Frames in HTML

Exercise:

1. Create a home page for a TLC in following format

```
<table>
<thead>
<tr>
<th>TLC Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Links</td>
</tr>
</tbody>
</table>
```
Experiment: 7

A PROGRAM TO CREATE A FILE SPLITTER.

ALGORITHM

1. START.
2. DECLARE THE VARIABLES TO BE USED IN THE PROCESS.
3. USING POINTERS OPEN THE TEXT (Suppose abc) AND ANOTHER ONE TOO AS TEMPORARY.
4. COPY THE TEXT TO OTHER.
5. CONCATENATE THEM.
6. SPLIT IT INTO MANY BY SOME DATA.
7. CHECK OUT THE COUNTED RESULT.
8. STOP.
```c
#include<stdio.h>
#include<conio.h>

void main()
{
    char cc, cat[2], cat1[20] = "c:\as\a1.txt";
    int count1=0;
    int count2=1;
    FILE *p,*q;
    p=fopen("c:\turboc\abc.txt","r");
    q=fopen("c:\as\a1.txt","w");
    while(fscanf(p,"%c",&cc)!=EOF)
    {
        if(count1>=100)
        {
            count1=0;
            fclose(q);
            count2++;
            itoa(count2,cat,10);
            q=fopen(cat1,"w");
        }
        printf(q,"%c",&cc);
        strcpy(cat1,"c:\as\a2");
        strcat(cat1,cat);
        strcat(cat1,".txt");
        q=fopen(cat1,"w");
    }
    printf(q,"%c",&cc);
}
```
count1++;
}
}
printf("file abc.txt is divided into %d subfile",count2);
getch();
}
Experiment: 8

STUDY ABOUT THE FLASH

Structure

1. How to work in Flash
2. Different Menus
3. Different Tools
4. Reshaping Objects
5. Animation
6. Publishing the Flash File
7. Exercise Sessions

HOW TO START AND WORK ON FLASH

To open flash

Step 1: Click on Start
Step 2: Click Program
Step 3: Click Macromedia Flash
Step 4: Click on Flash

After doing this you will get the flash screen, which looks like as given below:
The default file extension for a Flash movie file is .fla. Flash is used for creating Vector Animation / Movie. We can publish our flash movie file in .htm, .swf, .jpg, .gif, .exe, .mov, .png or as a projector file.

DIFFERENT MENUS
**File Menu:** Under file menu apart from the regular features, the other options available are Import, Export Movie, and Export Image. With these options you can import any image/movie or can export your complete movies or the scene as an image. Publish setting, Publish preview and Publish options helps you to publish your movie in the desired format, and before publishing you can preview the movie.

**Edit Menu:** Apart from the regular features like cut, copy, paste etc. it also provides an option called Edit Symbol. This option helps us to edit the symbol (Button). The four states of button are: Over, Down, Hit and

**View Menu:** Options available are Goto, 100%, Show Frame, Show All. These options helps to goto a particular frame (first, last, next, previous) or scene, shows the current frame or all the frames. Also available are Outline, Timeline, Workarea, Rulers, Grid, Snap. With the help of these options you can the view the frames as outlines, toggles on/off the timeline/workarea/rulers/grid. Snap helps to snap the object to the grid.

**Insert Menu:** The options Layer, motion guide, Frame, Key Frame, Blank Key Frame, Scene etc helps to insert the desired option(s). Convert to Symbol option helps to convert the editable object to Symbol / Button / Movie clip etc.

**Modify Menu:** The options under this menu helps to modify the object / layer / movie / scene etc. Under Transform option you have Scale, Rotate, Rotate Left, Rotate Right, Flip Horizontal, Flip Vertical; these options help to modify the object / image. Under Arrange option you have Bring to Front, Send to Back, Move Ahead, Move Behind; these help to arrange the object in order (in a layer). Other options available are; Group, Ungroup, Align (for grouping / ungrouping / align objects), Break apart (converting a symbol to editable object), Frames > Reverse (to reverse the frames of movie) and Instance (used for providing properties to the symbols. With the help of this option you can attach an Action to the symbol / button)
**Control Menu:** The options available under this menu are for controlling the movie i.e. Play, Forward, Rewind, Test Movie, Test Scene, Play in Loop etc.

**Libraries Menu:** Under this you will find the Libraries for Buttons, Advance Buttons, Graphics, Movie Clips and Sound.

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**DIFFERENT TOOLS**

**Arrow tool**

Use the arrow tool to select entire objects by clicking them or by dragging to enclose them within a rectangular selection marquee.

**Lasso tool**

Use the lasso tool and its polygon lasso modifier to select objects by drawing either a freehand or straight-edged selection area. When using the lasso tool, you can switch between the freeform and straight-edged selection modes.

**Text tool ("A" in the toolbar).**

Use the text tool to write anything in your scene/movie. The modifiers available are, font style, font size, color, Bold, italic, alignment, paragraph and text field.

You can use the line, oval, and rectangle tools to easily create these common shapes. The oval and rectangle tools let you stroke and fill the shape as you draw it. The rectangle tool lets you draw rectangles with square or rounded corners.
**Line tool:** Line tool can have only the thickness and the style. You can customize the list of options available with the line width and line style modifiers.

**Oval tool:** Click the oval tool and then draw an oval object. Using the fill color and stroke color modifier respectively you can fill the oval and also can have a different colored outline. Also you can define the thickness and the style of the outline of the oval object.

**Rectangle tool:** Click the rectangle tool and then click the round rectangle radius modifier to define a 20 point curve. The more you give radius the more it will be of circular. Here also you can set the outline style and thickness.

**Pencil tool:** The pencil tool is unique to Flash. Use it to draw lines, shapes, or freehand forms. The pencil tool has three modifiers; straighten, smooth and ink. After you draw lines, Flash straightens or smoothes them. The amount of straightening or smoothing depends on the selected drawing mode.

Lines drawn with Straighten, Smooth, and Ink mode, respectively.

**Brush tool**
The brush tool draws brush-like strokes as if you were painting. The brush tool lets you create special effects, including calligraphic effects and painting with the image in an imported bitmap.

The brush tool has these modifiers, Paint options, fill color, gradient, brush size, brush shape and lock fill. The brush tool has different paint options as shown in the picture next to the tool bar. Using these options you can draw or fill an object as shown below.

- Paint Normal paints over lines and fills on the same layer.
- Paint Behind paints in blank areas of the Stage, leaving lines and fills unaffected.
- Paint Fills paints fills and empty areas, leaving lines unaffected.
- Paint Selection paints the selected fill.
- Paint Inside paints the fill in which you start a brush stroke and never paints lines.

**Paint bucket tool:** Used to change the color of existing paint and fill empty areas surrounded by lines. You can fill an area with a gradient the same way you can with a solid color.
With **Inkbottle** you can stroke lines and shapes with only solid colors you've already drawn, but not with gradients or bitmaps. Stroke attributes also include line width and line style.

The **Eraser tool** erases lines and fills. Customize it to erase only lines, only fills, only selected fills, or only the fill on which you started erasing. The eraser tool can be either round or square, and have one of five sizes.

- **Erase Normal** erases lines and fills on the same layer.
- **Erase Fills** erases only fills; lines are not affected.
- **Erase Lines** erases only lines; fills are not affected.
- **Erase Selected Fills** erases only the currently selected fills and does not affect lines, selected or not.
- **Erase Inside** erases only the fill on which you begin the eraser stroke. If you begin erasing from an empty point, nothing will be erased. Lines are unaffected by the eraser in this mode.

The **faucet option** under eraser tool erases the fill color. You can also erase lines with the faucet modifier.
STUDY ABOUT THE DREAMWEAVER

Structure

1. How to work in Dreamweaver

2. To save your file
3. Different Menus
4. Adding Layers in Timeline
5. Inserting Scripts
6. Inserting external medias
7. Adding SSI files
8. Adding CSS styles
9. Adding XML files
10. Exporting Dreamweaver file as XML file
11. Exercise Sessions

HOW TO WORK IN DREAMWEAVER
WHERE AND HOW TO OPEN DREAMWEAVER

Step 1: Click on Start
Step 2: Select Program
Step 3: Select Macromedia Dreamweaver
Step 4: Click on Dreamweaver

You will get the screen as given below:

On opening Dreamweaver you will get 3 main windows, (1) Object; which contains Character, Common, Forms, Frames, Head and Invisible. Many options are available under these, like under common you will get, insertion of image, rollover image, layer, tabular data, horizontal bar, line break, email link, date, flash movie, fireworks object, shockwave file, generator, plug-ins, active x controls, SSI etc; under character you will find some special character/symbols like ©, ®, £, ¥, ™ etc; under frames you will find different type/style of frames; under forms you will find all the elements of forms, like
text box, password box, radio button, check box, selection box, jump menu, submit & reset button etc; (2) Properties; which provides the properties of the selected object/item, page properties etc; (3) Launcher; which contains: Site, Library, HTML Style, CSS Style, Behaviors, History, HTML Source; On clicking any of the item on the Launcher the subsequent window opens up.

Before creating your web page you have to create a Root directory in which all of your work will be saved. Then in dream weaver create a Site and Provide the Root Directory (which you have created). To do this;

Step 1: Select Site from Launcher window
Step 2: Click on Define Site
Step 3: Click on NEW
Step 4: Give a name under “Site Name”
Step 5: Select the folder by browsing under “Local root folder”
Step 6: Click on OK
Step 7: Click on DONE

Now start working on Dreamweaver.

Write your text, format the text, insert picture through Object window or by INSERT -> IMAGE. The Insert Menu provides you all the features available under the Object window. The modify menu provides you to modify the selection properties, page properties, link, table, frames etc. The Text menu helps to do all the formatting for the text, like selecting font, font-size, color, alignment etc.

TO SAVE YOUR FILE
Step 1: Click on FILE
Step 2: Click on SAVE
Step 3: Choose the folder in which you want to save
Step 4: Provide a name to the file (with .htm / .html extension)
Step 5: Click on SAVE

DIFFERENT MENUS

File Menu: Under it we have New, Save, Save as, Save as template, Import, Export, Preview in browser etc. options.

Edit Menu: In this menu we Cut, Copy, Paste, Undo, Redo, Select all, Find, Replace, Preference etc. options which helps us in editing the document.

View Menu: Rulers, Grids, Plugins etc. are available under it.

Insert Menu: It contains almost all the things which are there in the Object tool bar.

Modify Menu: Under this we have Page properties, selection properties, Make link, remove link, link target, table, layer, frameset, library, template, timeline, translate etc. This menu helps to modify the page by choosing the option as per requirement.

Text Menu: It helps to format the text written in the page by providing details, such as indent, outdent, list (ol, ul, dl), alignment, font, style, size, size increase, size decrease, HTML style, CSS style, color etc. It also provides to check the spellings in the page.
Site Menu: This menu contains site files, site map, new site, open site, define site options.

Window Menu: It contains all the different windows, like, object, properties, launcher, site file, site map, CSS, timeline, history, behavior, layer, frame, library, template etc.

___

**ADDING A LAYER TO THE TIMELINE AND GIVING MOTION TO THE LAYER.**

---

Step 1: Choose Layer from Common toolbar and draw a layer.
Step 2: Write the text inside the Layer.
Step 3: Click on Modify (when the layer is selected)
Step 4: Click on Timeline
Step 5: Click on Add layer to timeline.
Step 6: Modify -> Timeline -> Select Record path to Layer
Step 7: Drag the layer as per your wish to define a path.
Step 8: Tick on Auto Play & Loop (if required)
Step 9: Open it in the Browser to see the effect.

---

**INSERTING SCRIPTS TO YOUR PAGE**

---

Step 1: Click on Insert
Step 2: Click on Script
Step 3: Choose the type of Script
Step 4: Write the code in “Content”
Step 5: To finish click on OK

INSERTING EXTERNAL MEDIA’S IN THE WEB PAGE

Step 1: Click on the icon in the object tool bar
Or
Insert -> Media -> Choose the media type to be inserted
Step 2: Find and select the file required (browse)
Step 3: Click on OK
ADDING SSI (SERVER-SIDE INCLUDE) TO THE PAGE

Step 1: Click on the icon in the object tool bar
Or
Insert -> SSI
Step 2: Select the file
Step 3: Add the file
Step 4: Provide the URL (where to be attached)
Step 5: Provide information on Relative to the document or to the “Site Root”
Step 6: Click on OK

TO SHOW/HIDE THE SSI DOCUMENT IN THE PAGE

Step 1: Click on Edit
Step 2: Select reference
Step 3: Select Translation
Step 4: Click on SSI
Step 5: For showing the SSI file; choose one from the following option:
   a) a) in all files
   b) b) in no files
   c) c) in files with extension (stm, htm, html, shtm, shtml)
   d) d) in files matching one of these expressions “<!-- #include”
Step 6: Click on OK

---

**ADDING CSS STYLE TO YOUR PAGE**

Step 1: Click on Window Menu
Step 2: Select CSS Styles
Or Click on CSS Styles in the “Launcher”
Step 3: Click on New to create a new CSS style
Step 4: Choose the Type
  a) a) Make custom style
  b) b) Redefine HTML
  c) c) Use CSS Selection
Step 5: Give a name
Step Click OK

On choosing (a) of step 4 you will get a new screen in which you have to provide the following details in Category:

i. i. Type : Provide the Font, Size, Style, Weight, Decoration, then click OK
ii. ii. Background: provide a Color or insert an image, then click OK
iii. iii. Block: Give the alignment style, then click OK
iv. iv. Box: Provide the margin setup of Top, Left, Right & Bottom, then click OK
v. v. Border: Provide the width & color, then click OK
vi. vi. List: Select the list type (OL, UL, DL), then click OK
vii. vii. Positioning: Provide the style, Visibility, Z-index, Placement (Top, Left, Right & Bottom), click OK

After providing the details, select the style from the CSS style window. Choose where to apply this style (body, p, layer etc), by clicking on Apply button in the CSS style window.

---

**ADDING A XML FILE TO YOUR PAGE**

Step 1: Choose File -> Import XML into Template
Step 2: Select the XML file & click Open

When an XML file is imported, Dreamweaver merges the XML content into the template, which is being specified in the XML file and shows the result in the document window of Dreamweaver. If that specified template is not found then Dreamweaver prompts to select another template for use.

The XML file should contain the name of the template and editable region as XML tags.

**EXAMPLE:**

```xml
<doctitle>
  <![CDATA[<title>newtemplate</title>]]>
</doctitle>
<Edit-Region>
  <![CDATA[{Edit-Region}]]>
</Edit-Region>
```
Here doctitle identifies the title of the template and edit-region identifies the editable region.

But in a standard Dreamweaver file XML tags use the “item name”. The above example (XML tags) is given below in standard Dreamweaver file:

```xml
<item name="doctitle">
    <![CDATA[<title>newtemplate</title>]]>
</item>
<item name="Edit-Region">
    <![CDATA[{Edit-Region}]]></item>
</item>
```

Here “item name=doctitle” identifies the title of the template and “item name=edit region” identifies the editable region.

**TO EXPORT A DREAMWEAVER DOCUMENT AS XML FILE**

Step 1: Choose File -> Open,
Step 2: Select the document that uses a template (and has editable regions)
Step 3: Click Open
Step 4: Choose File -> Export -> Export Editable Regions as XML.
Step 5: In the XML dialog box, choose a tag notation
Step 6: Click OK.
Step 7: Enter a name for the XML file
Step 8: Click Save.
When the document is exported, the generated XML file contains the name of the template the document is using and all editable region names.
STUDY ABOUT THE PHOTO SHOP

Structure
1. About Photoshop
2. Saving your work
3. Tools available in photoshop
4. Effects
5. Different windows
6. Different menu
7. Exercises

ABOUT PHOTO SHOP

Adobe Photoshop – the imaging software application - has become more than an integral part of graphic designers’ working tools. Photoshop has earned the reputation of being a mysterious, magical environment where reality is twisted and reshaped, where disintegrating family photos are returned to perfect condition, and where the line between illustration and photography is freely crossed.

Photoshop provides you some special features like, Image retouching, Advanced Imaging, Special effect using filters, creating stunning backgrounds, images, texts and buttons for your web pages. This is best software application available in the market for Image Manipulation.

HOW TO WORK IN PHOTO SHOP

How to open Photoshop

Step 1: Click on START
Step 2: Select Programs
Step 3: Select Adobe
Step 4: Select PhotoShop 5.x
Step 5: Click on Photoshop 5.x

After finishing doing this you will get a screen like this (below):

The above screen provides you the tool bar and few other windows, but not the work area.

**For work area:**

Step 1: Click on FILE
Step 2: Click on NEW

The next screen will appear, which will require few inputs from you, like

i. The height and width of the work area in pixel / inches / cm / points / picas / columns,
ii. The resolution for the file
iii. The image color mode Bitmap / Grayscale / RGB / CMYK / lab color
iv. The last option for the type of background required white / background color / transparent.
v. Give a file name under “Name”
vi. Click on OK
The Screen looks like as given below.

![Image of a Photoshop window showing settings for image size, resolution, and contents options.]

The normal size for work area is 640 pixels (width) x 480 pixels (height) with the resolution 72 pixels/inch.

Now as you have got the work area, you can start working on it.

With the help of the Photoshop tool bar you can create, edit, retouch, manipulate your drawing or imported image.

**TO SAVE YOUR WORK**

Step 1:  Click on File
Step 2:  Click on Save / Save as
Step 3:  Select the directory under which the file you want to save
Step 4:  Provide a name (if not provided at the time of creating a new file)
Step 5:  Click on Save

*Note: Photoshop saves the file in .psd file format*

For saving your work either in .jpg or in .gif for your webpage do the following;
For JPEG file format:

Step 1:   Click on File
Step 2:   Click on Save a copy…
Step 3:   Select the directory under which the file you want to save
Step 4:   Provide a name
Step 5:   Select JPEG from under the “Save as” option.
Step 6:   Click on Save

For GIF file format:

Step 1:   Click on File
Step 2:   Click on Export
Step 3:   Click on GIF89a export

You will get the following screen

Step 4:   without changing anything (as above) Click on OK
Step 5:   Select the directory under which the file you want to save
For a new page (work area)

Click File > New (the screen look like as given below)

In the **Document Setup** window do the following:
Step 1: Select the page size (letter, Legal, Tabloid, A3, A4 etc.)

Step 2: Select the orientation {Tall (same as portrait) / Wide (same as landscape)}

Step 3: Check the options for double sided and facing pages or only double sided pages, if you want the pages to be in mirror of one another, or else don’t check the double-sided option this will give a normal page. When Double-sided is selected, side margins are labeled Inside and Outside. Otherwise, side margins become Left and Right.

Step 4: Insert the number of pages you require.

Step 5: Provide the starting page number.

Step 6: Click on Numbers to select the type of page number (Numeric / Roman / Alphabets).

Step 7: Set the output resolution (dots per inch).

Step 8: Select the Printer.

Step 9: After providing the details click on OK

Now your environment looks like:
TOOL BOX

Choose Window > Show Tools or Window > Hide Tools to display or hide the toolbox.

- **Pointer tool:** Used to select, move, and resize text blocks and graphics.
- **Text tool:** Used to type, select, and edit text.
- **Rotating tool:** Used to select and rotate objects.
- **Cropping tool:** Used to trim imported graphics.
- **Line tool:** Used to draw straight lines in any direction.
- **Constrained line tool:** Used to draw vertical or horizontal lines.
- **Rectangle tool:** Used to draw rectangles and squares.
- **Rectangle frame tool:** Used to create a rectangular placeholder for text and graphics or you can define an area for the text / graphics.
- **Ellipse tool:** Used to draw ellipses and circles.
- **Ellipse frame tool:** Used to create a circular or oval placeholder for text and graphics or you can define an area for the text / graphics.
- **Polygon tool:** Used to draw basic polygons.
- **Polygon frame tool:** Used to create a polygonal placeholder for text and graphics or you can define an area for the text / graphics.
- **Hand tool:** Used to scroll the page or to preview and test hyperlinks.
**Zoom tool:** Used to magnify or reduce an area of the page.

When you select any of these tools, you get the properties for that tool in the property bar. With the help of the property bar you can rotate, skew the shape and format the text.

---

**MENUS**

In PageMaker you will find these menus; File, Edit, Layout, Type, Element, Utilities, View, Window and Help. The options available under these menus are given below.

**File Menu:** The options available under file menu are; New, Open, Recent Publication, Close, Save, Save as, Revert, Place, Acquire, Export, Document setup, Printer style, Print, Preferences, Send Mail and Exit.
You can Acquire either a source by selecting Select source or an image by selecting Acquire Image (only .tif file). You can export your file as Adobe PDF / HTML / Graphic / Text. You can set your preferences by selecting any of these options under Preferences General / Online / Layout adjustment / Trapping.

To change the rulers from Inches to Millimeter or any other measuring format do the following:
Click on File > Preferences > General
On doing this, you will get the following screen;
In this select the type for “Measurement in”, select the type for “Vertical ruler”. On selecting this two the horizontal and vertical nudge under control pallet will change to the same automatically. Horizontal nudge is dependent on “Measurements in” and vertical nudge is dependent on “Vertical ruler”. The different measuring formats are; inches, inches decimal, millimeters, picas and ciceros for “Measurement in” and for “Vertical ruler” you will find all these plus custom. For setting the font style, size, graphics size etc. click on the “More” button for more preference. The screen looks like as given below:
The options available under edit menu are; Undo/Redo, Cut, Copy, Paste, Clear/Delete, Select all, Deselect all, Paste special, Paste Multiple, Insert object, Edit Story, Edit Original. You can insert any object (format) with the help of Insert Object. With the help of Paste multiple you can paste as many number of copies of an object at a single go. By selecting paste multiple you will get the following screen, all you have to do is to provide the number of copies you require and the Horizontal and Vertical offset (position) from the original object.

Paste Special will paste the object as Bitmap image.

The options available under Layout menu are; Goto Page, Insert pages, Remove Pages, Sort Pages, Go Back, Go Forward, Column Guides, Copy Master Guides, Auto flow. These options helps to insert, remove pages, goto a particular page, either go forward or backward (pages), Inserting columns, interchange the pages (sort).
**Type Menu:** The options available under type menu are; Font (for different fonts), Size (font size), Leading (line spacing), Type Style (bold / italic / underline etc), Expert Kerning, Expert Tracking and horizontal scale (these 3 options are used for character spacing), Character (for formatting of the text) (screen given below),

![Character Specifications](image1.png)

Paragraphs (used for paragraph alignment, spacing, indentation etc) (screen given below),

![Paragraph Specifications](image2.png)

Indents / Tabs (used for specifying tabs) (screen given below),

![Indents/Tabs](image3.png)

Hyphenation (used for defining the style and type hyphen) (screen given below),
Alignment (left, center, right, justify or force justify; force justify will force the line to align justify), Style (used for defining the style of your text; body text, caption, hanging indent, headline or subheads), Define styles (same as style) (screen given below)

**Element Menu:** The options available under Element menu are; Fill, Stroke, Fill & Stroke, Frame (attach content / Frame option / change to frame / next frame / previous frame / remove from threads / delete content), Arrange (bring to front / bring forward / send backward / send to back), Align objects, Text wrap, Group, Ungroup, Lock position, Unlock, Mask, Unmask, Image (image control / CMS(Color Management system) source / Photoshop effect). Polygon settings, Rounded corners, link into, Link options, Non-printing, Remove transformation. Some of these options defined below.

**Fill:** Used for filling an object created in PageMaker. Fill option provides different types of fills as shown below:
**Stroke:** It is used for providing an outline to the object created by using the PageMaker tool. The different types of stroke options are as shown below:

**Fill & Stroke:** It is a combination of fill and stroke options. You can fill and stroke the object at the same time. The options available under this are same as that of fill option and stroke option. You can provide a color to your fill and stroke, adjust the color tint, also can make it in reverse. Screen as shown below:
Align Objects: Used to align the objects created in your page. You can align or distribute them Vertically or Horizontally or both at the same time. Refer the screen below:

Polygon settings: You can create a shape using the polygon setting, as shown below:

To create a star:
To create a triangle: Number of sides 3, star inset 0%
To create a square: Number of sides 4, star inset 0%

**Rounded corners:** With this option you can give a rounded corner to the square object created by you using the square tool. Select the square and choose rounded corner, and select the type of rounded corner you need from the window/screen (as shown below) and click OK.

**Utilities Menu:** The options available under utilities menu are; Plug-ins (for creating color library), Find, Find next, Change, Spelling, Book, Index entry, Show index, Create index, Create TOC, Define colors.
These options are mainly used for finding a particular word and replacing it with a different word, checking the spelling, creating index and Table of Contents etc.

**View Menu:** The options available under view menu are; Display master items, Display non-printing items, Zoom in, Zoom out, Actual size, Fit in window, Entire paste board, Zoom to (25%, 50%, 75% etc.), Show / Hide rulers, Snap to rulers, Zero Lock, Show / Hide guides, Snap to guides, Lock guides, Clear ruler guides, Send guides to back, Show / Hide Scroll bars.
The options in this menu bar help us to show or hide the features like rulers/guides/scroll bars etc., to see the content zoomed either by providing the % of zoom or by fixing it to
the window or the actual size, we can also zoom out if it is zoomed in. One can also snap
and lock the object(s) either to the ruler or to the guides.

**Window Menu:** The options available under this menu are; Arrange icons, Tile,
Cascade, Show / Hide Tools, Show / Hide Control Pallet, Show / Hide Colors, Show /
Hide Styles, Show / Hide Layers, Show / Hide Master page, Show / Hide Hyperlinks,
Plug-in Pallets (show library / show scripts). These options help to toggle the show / hide
of different pallets.

**Help Menu:** Provides help on PageMaker.
Creating a Frame:
You can also turn any object you've created with the PageMaker drawing tools (except the straight lines) into a frame.

To turn a basic shape into a frame:
1 Create a PageMaker-drawn shape.
2 Select the shape
3 Choose Element > Change to Frame.

The shape preserves its fill, line weight, and other object attributes.

To attach existing text or graphics to a frame:
1 Create a Frame
2 Write the text
3 Select the Frame (by using the pointer tool)
3 Press Shift and select the text block you want to add to the frame.
3 Choose Element > Frame > Attach Content.

To import text or graphics into a frame:
1 Create a Frame
2 Select the frame.
3 Choose File > Place.
4 Select the file you want to place, and then click OK.

To detach / separate content from a frame:
1 Select the frame which contains text or graphics.
2 Choose Element > Frame > Separate Content.

**To delete content from a frame:**
1 Select the frame which contains some content.
2 Choose Element > Frame > Delete Content.

**Note:**
Once a frame contains content, you cannot rotate, skew, or flip the content independently of the frame it is in; text and graphics added to a frame take on the same transformation applied to the frame. You can, however, modify an image within a frame with commands such as Image Control, or Photoshop Effects. To resize a graphic which is inside a frame, you must separate the content from the frame first and then only you can resize the graphic.

**To save your Work:**
Choose File > Save > select the folder > provide a name > OK
Default extension of PageMaker file is .pmx (x stands for the version) example: .pm65 for version 6.5
Experiment: 11

**PROGRAM FOR TOSSEING UP A COIN:**

**ALGORITHM:**

1. START
2. DETECT THE GRAPHS AND ALSO INITIALIZE THE GRAPHICS.
3. DRAW THE ELLIPSE AND WRITE TWO VALUES IN IT HEAD AND TAIL
4. FILL THE COLOR IN ELLIPSE
5. IF VALUE IN COIN MATCH THE PLAYER VALUE PLAYER WILL WON
6. STOP.
```c
#include<conio.h>
#include<process.h>
#include<graphics.h>
#include<dos.h>
#include<math.h>
#include<stdlib.h>
#include<ctype.h>
#include<stdio.h>
#include<time.h>

void main()
{
    int gdriver = DETECT, gmode, errorcode;

    int y2=240, y1=40;
    int k;
    int flag=0;
    int flag1=0;
    char ch;
    int f;
    initgraph(&gdriver, &gmode, "c:\tc\bgi");
    setfillstyle(1,7);
    setcolor(7);
    fillellipse(320, y2, 40, y1);

    while(y2<320)
    {
        while(kbhit())
```
ch=getch();
setcolor(0);
cleardevice();
setbkcolor(0);
fillellipse(320,y2,40,y1);
if (ch==' ')
exit(0);
if (y1==0)
flag1=1;
if (y1==40)
flag1=0;
if (flag1==0)
y1-=5;
if (flag1==1)
y1+=5;
if (y2==100)
flag=1;
if(y2==300)
flag=2;
if(flag==0)
y2--;
if(flag==1)
y2++;
if(flag==2)
goto again;
setcolor(7);
setbkcolor(7);
fillellipse(320,y2,40,y1);
delay(5);
again:

setcolor(0);
randomize();
k=random(1000);
if (k<=500)
  outtextxy(306,298,"HEAD");
else
  outtextxy(306,298,"TAIL");
getch();
cleardevice();
for (f=0;f<100;f++)
{
  delay(100);
  setcolor(f);
  settextstyle(6,0,4);
  outtextxy(50,240,"THE WINNER OF THE COIN TOSS STARTS");
  if (kbhit())
    break;
}
getch();
}
TOSSING A COIN:-

OUTPUT

THE WINNER OF THE COIN TOSS STARTS
PROGRAM TO DRAW A LINE USING C OR C++

LANGUAGE:-

ALGORITHM

1. START
2. DETECT THE GRAPHS AND ALSO INITIALIZE THE GRAPHICS.
3. TAKE THE POINTS BY WHICH YOU CAN DRAW A LINE
4. TAKE THE DIFFERENCE BETWEEN POINTS
5. FINALLY TAKE THE POINTS AND DRAW THE LINE
6. STOP.
SOURCE CODE

#include<stdio.h>
#include<conio.h>
#include<graphics.h>
#include<math.h>
#include<stdlib.h>

void main()
{
    int gd=DETECT, gm;
    initgraph(&gd,&gm,"");

    float k=0;
    float x1,y1,x2,y2,steps,xi,yi,dx,dy;
    printf("enter the end points of a line");
    scanf("%f,%f,%f,%f",&x1,&y1,&x2,&y2);
    dx=x2-x1;
    dy=y2-y1;
    if(abs(dx)>abs(dy))
        steps=abs(dx);
    else
        steps=abs(dy);
    xi=dx/steps;
    yi=dy/steps;
    putpixel(x1,y1,20);

    do
    {
        x1=x1+xi;
    }
y1=y1+yi;
k=k+1;
putpixel(x1,y1,20);
}
while(k!=steps);
getch();
}
NEW IDEAS/EXPERIMENTS FOR RESPECTIVE LAB
BESIDES UNIVERSITY SYLLABUS

1. WE HAVE GIVEN NEW ASSIGNMENTS TO STUDENTS LIKE LINKING OF LAYERS IN PHOTOSHOP.

2. WE HAVE GIVEN NEW ASSIGNMENTS TO STUDENTS LIKE MORPHING.

3. ALSO WE HAVE GIVEN FLASH AND DREAMWEAVER ASSIGNMENTS TO STUDENTS.

Reference Books:
- Multimedia: Production, planning and delivery, Villamil & Molina, Que, 1997
- Multimedia on the PC, Sinclair, BPB
• Multimedia: Making it work, Tay Vaughan, fifth edition, 1994, TMH.
• Multimedia in Action by James E Shuman, 1997, Wadsworth Publ.,
• Multimedia in Practice by Jeff coate Judith, 1995, PHI.
• Multimedia Systems by Koegel, AWL.
• Multimedia Making it Work by Vaughan, etl.
• Multimedia Communications by Halsall & Fred, 2001, AW.
FAQ FOR EACH EXPERIMENT

FAQ for experiment 1

1. Name any five software tools

2. Give any two application of each tool

FAQ for experiment 2

1. Name any five hardware tools

2. Give any two application of each tool.

FAQ for experiment 3

1. What is BMP.

2. Give any two application of BMP file.

3. What is difference between BMP and vector drawn graphics.

FAQ for experiment 4

1. What is animation?

2. Give two examples of animation in market?
3 Name any five tools used in animation.

**FAQ for experiment 5**

1. What is Morphing?

2. Give any two application of morphing in market.

**FAQ for experiment 6**

1. What is full form of HTML?

2. What are applications of HTML?

3. What is cellpadding and cellspacing?

4. Name any five tags of HTML.

**FAQ for experiment 7**

1. What is File Splitter?

2. Why you need to split a file?

3. What is gd=DETECT in your program?

**FAQ for experiment 8**

1. What is flash?

2. Give two examples of flash in market?

3 Name any five tools used in flash.
FAQ for experiment 9

1. What is Dreamweaver?

2. Give two examples of Dreamweaver?

   in market?

3. Name any five tools used in Dreamweaver?

FAQ for experiment 10

1. What is Photoshp?

2. Give two examples of Photoshp?

   in market?

3. Name any five tools used in Photoshp?

FAQ for experiment 11

1. Give two examples of multimedia in the field of games.

   2. What is work of randomize function in your program.

FAQ for experiment 12

1. What is DDA algorithm?

2. What is Breshemans algorithm?

3. Which is better out of DDA and Breshemans?