

MODULES

Class – IX

April/May

Open office .org writer I

Report file

Poster Making – Global Warming

July

Open office .org writer II

Report file

Mail merge – formal / Informal letter

August

Open office .org calc I

Report file

School / Class result with Student-wise and Subject-wise marks

Cricket Score record

September: SA1

Project Work: Open office .org writer I, Open office .org writer II & Open office .org calc I.

October

Open office .org calc II

Report file (Chart)

School / Class result with Student-wise and Subject-wise marks

Cricket Score record

November

Open office .org impress

Report file

School magazine / Environment and pollution

December

Flash

Report file

Movement of ball with help of tweening

January

Photoshop

Report file

Bouquet of flowers

February

Revision

March -SA-II

Flash, Photoshop , Open office .org calc II, Open office .org impress.

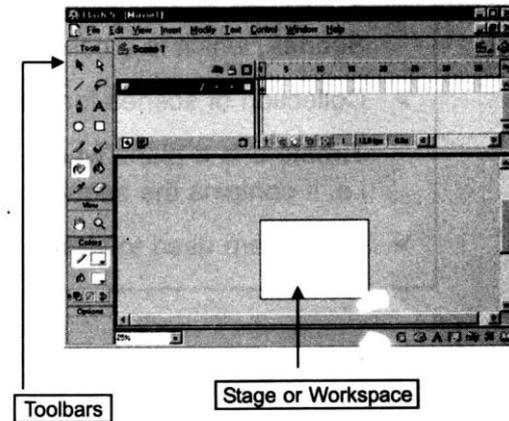
FLASH

Macromedia Flash is a professional standard tool used to produce high-impact web pages and web sites that includes a good amount of animation, sound, graphics and interactivity. The extension of a Flash file is .fla

To open the flash window, perform the following steps:

1. Click the start menu.
2. Go to Programs.
3. Click at Macromedia Flash.
4. Click Flash.

The following screen appears:



The white rectangular area within the window is called the *Stage or Workspace*. Any graphics placed in this area will be visible to the user. On the left side of the window appears the toolbox that contains all the drawing tools in Flash.

As the Flash window is opened, an unsaved document appears called as *Movie 1*. A Flash movie is further divided into number of *Scenes*.

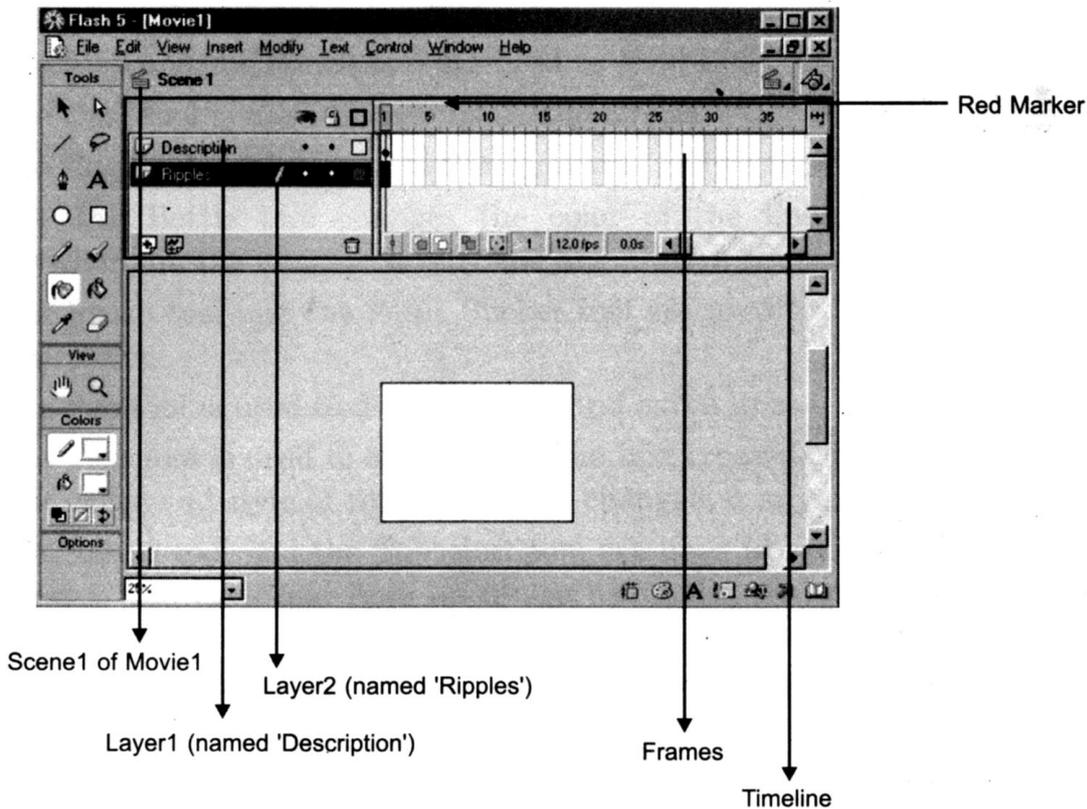
A *Scene* can be considered as a chapter in a book. The advantage of breaking a movie into scenes is, every scene can be accessed individually and thus the sequence or order of the scenes can be changed. The default name of the first scene of the movie is *Scene 1*.

Every scene can be further divided into *Layers*, which can be considered as a topic in a chapter. Images or text can be stored in the form of layers so that the animations can be controlled independently.

Every image in the Layer is called a *Frame*. The frames are the little rectangular cells, which are numbered. The contents of only one frame can be seen at a time. The red marker on the frame indicates the frame that is currently viewed.

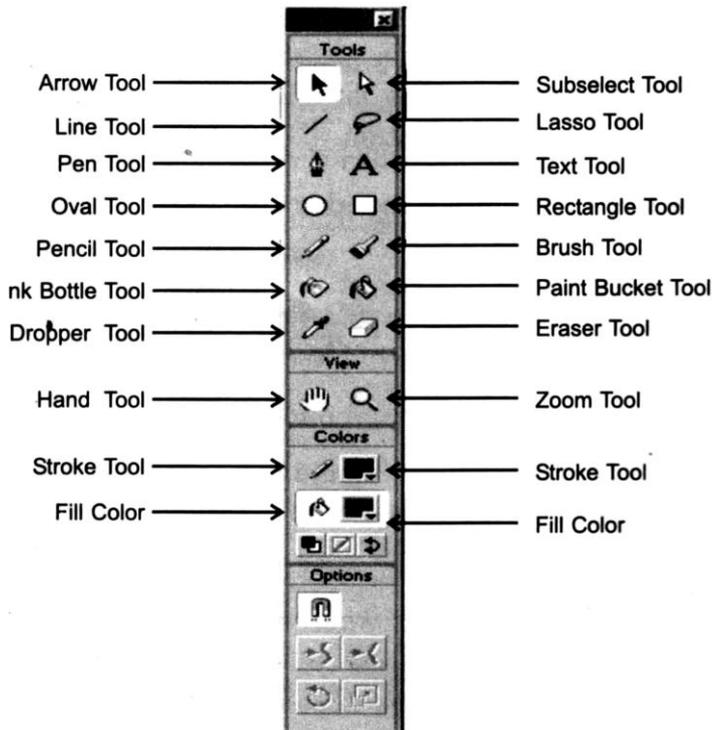
Summary:

- The white rectangular area within the window, where an object is drawn is called the **stage or workspace**.
- Every image in the animation is called a **Frame**.
- The **layers** are used to organize all the contents that are part of animation as they store frames.
- A large or complicated Flash Movie can be broken into several **Scenes**, which is a collection of Layers.
- Collection of scenes for a **Flash Movie**.
- **Timeline** is a place where the timing of the animation is adjusted, i.e. it contains the sequence of images that make an animation.
- **Panels** are used to view and change the properties of the object.



Toolbars

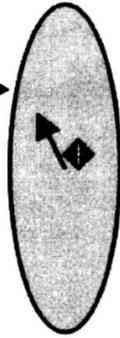
Toolbars are seen on the left side of the flash window, which are used to create graphics and text. If the tools are not visible, then use Window<Tools Option.



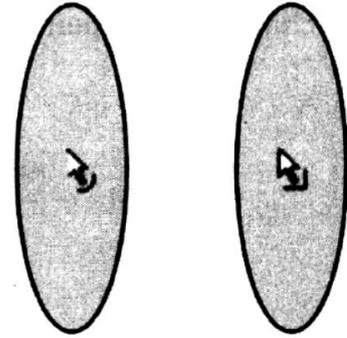
Lets see briefly, what some of the commonly used toolbars do: -

- The Line and the Pencil tool are used to draw lines.
- The Oval tool is used to draw ovals and circles.
- The Rectangle tool is used to draw squares and rectangles.
- The Ink Bottle tool changes the color of the lines, which is to be clicked anywhere on the shape and only the line portion changes.
- The Brush tool and the Paint Bucket tool are used to fill any enclosed area with some color.
- The Pen tool is used to draw straight and curve lines.
- The Text tool is used to create text. The text created can be modified, that is, the font; color and style of the text can be changed at any point of time.
- The Arrow tool and the Subselect tool are used to select an object by clicking it once. If you click and drag an image using the arrow tool, then only the filled portion of the image moves and not its border. To make the border also move (i.e. the complete image) double-click inside the image and then drag it. This tool is also used to change the shape of the image. To do so, move the cursor near the outside edge of the image and the cursor will change and then you drag it to give it an appropriate shape.

This cursor indicates that the image is ready to be moved if clicked.



These cursors indicate that if you click and drag, the shape of the image will change.



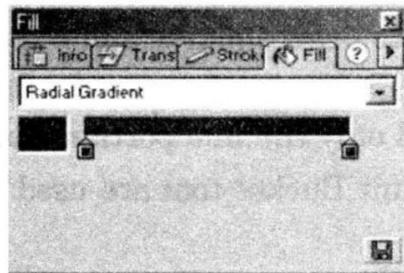
- The Dropper tool lets the user choose a color already existing on the screen and use it elsewhere. To do so, click the dropper tool, keep it on the sample image and click it. The Paint Bucket tool becomes active if the dropper tool is kept inside the image while the Ink Bottle tool becomes active if the dropper tool is kept on the border of the image.
- The Lasso tool is used for freehand selections, so that any part of the object can be selected.

Panels

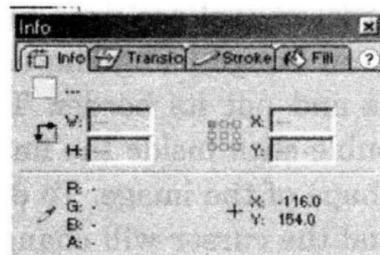
On the right hand side of the flash window appears the panels which allow the user, to change the properties of the objects.

Some of the important panels are:

- (a) **Fill Panel:** This panel allows the user to change the color of the painted object. To open this panel, select Window < Color Mixer.



- (b) **Info Panel:** Appearance of the object (image/text) can be changed through this panel. That is, height and width of the object can be changed. To open this panel, select Window < Info.



LAYERS AND FRAMES

There are three types of layers in flash:

- Normal layer
- Guide / Guided layer
- Mask / Masked layer

Normal Layer: It's the default layer this layer guides the path to the other layers. The layer is made the guide layer by selecting the layer properties (Modify < Timeline < Layer properties) and choosing the Layer type option as guide.

Guide / Guided layer

The layer that will follow the path provided by the guide layer will be called as *Guided layer*.

Note that the Guided layer do not appear in the Flash Movie.

Mask and Masked Layer: This layer lets you place any shape or symbol that will define the visible or non-visible portion of the layer below it. The graphical contents of the mask layer will determine which portion of the layer below it will show through. A layer is selected as a mask layer by going to the layer properties and selection mask option. The layer below the mask layer is the masked layer.

For example, if you draw a filled circle in the mask layer and a number of colorful boxes in the masked layer, then the content of the masked layer will be shown through the circle made in the mask layer, of course, depending upon the path the mask layer will follow.

Layer Properties

All layers can be controlled through some properties associated with them. To open the Layer property dialog box, do any of these:

- Right click on the layer name and select properties.

OR

- Click the Modify option from the Menu bar and select layers.

To change the property of any layer, it should be selected. To select a layer, click on the layer name. A pencil icon will appear near the layer name, which indicates that the layer is selected and can be modified.

Adding a Layer

- To insert a layer, go to the Insert menu on the Menu bar and select Layer.

OR

- Right Click on any Layer and select Insert Layer.

Deleting a Layer

- Right Click on the Layer and select Delete Layer.

Summary:

- **Layers** are used to store images, which are used for animation, so that they can be controlled independently and modification can be done whenever required.
- The Layer properties are **Layer Name, Show/Hide Layer, Lock/Unlock Layer, View Layer as Outline and Layer Height.**

FRAMES

Concept of Frame

Animation, is made from individual images. Actually, animation is a collection of a number of still images at different locations. But the transition from one image to another is so fast that everything appears to be moving. Every image in animation is called a *Frame*.

To Insert a frame:

- Go to the Insert menu on the Menu bar and select timeline then frame.

OR

- Right Click the mouse button on the frame number and select the option Insert frame

To Delete a frame:

- Right Click the mouse button on any create frame number and select the option Remove frame.

Note that the last frame will be deleted.

To Copy a frame:

- Select the frame number to be copied, right click the mouse button and select the option Copy frame.

To Paste a frame:

- To paste the frame, select the frame number when the frame is to be pasted, right click the mouse button and choose the option Paste frame.

Note: To select more than one frame, just click at the starting frame and drag till the end frame and you can perform the option like Delete frames for all the frames selected. Thus, all the frames selected will be deleted at once.

Keyframe and Blank Keyframe

A *Keyframe* is simply a frame in which the user can indicate the change at a particular point. That is, a keyframe indicates either the change in the image appearance or its position on the screen, so through a keyframe, you can indicate what should appear on the screen at a particular point. A keyframe might include an image or it might be blank. A *Blank Keyframe* is also a keyframe, but it's the one in which nothing appears on the screen.

To insert a Keyframe/ Blank Keyframe: -

- Choose a frame by clicking it, go to the Insert menu on the Menu bar and timeline choose the option Keyframe. If no image is present in the layer, then a blank keyframe is inserted.

OR

- Choose the frame, click the right mouse button and select the option Insert keyframe. To insert a Blank Keyframe select the option Insert Blank keyframe by clicking the right mouse button.

A keyframe when created will be indicated by either a white square or a solid circle. The contents for the keyframe are copied from the previous keyframe and if there is nothing on the previous keyframe, then a blank keyframe is inserted. Thus, if an image or an object is present in the previous keyframe, then that image or object will be copied to the new keyframe. If you click at any frame within the two keyframes, then the contents of the previous keyframe will be seen.

To Delete a Keyframe/ Blank Keyframe:

- Put the red marker on any of the created frame number, go to the Insert menu on the Menu bar and select delete frame.

OR

- Right Click the mouse button on any create frame number and select the option Delete frame.

Concept of a Symbol

Flash provides the facility to store the objects (i.e. images and text) in a place called

Library. Everytime a symbol is selected from the library to be used in the movie, its copy is used and this copy of the symbol is called as the *Instance*.

MOTION. SHAPE TWEENING

Flash provides you the facility to show the transition of the image from one keyframe to another keyframe. This transition is called as *Tweening*.

Through tweening, the user can not only see the transition from one image to another in terms of its shape but also in terms of its motion. For example, through tweening you can show a ball bouncing or moving vertically or horizontally or showing the change in the color of the text slowly, etc.

Flash has two types of tweening:

1. Motion Tweening
2. Shape Tweening

Motion Tweening: It is used to tween the text/image in terms of its:

Position (i.e. to show the object moving from one place to another),

Scale (i.e. to show the change in the size of the object),

Rotation (i.e. to show the change in the angle of the object),

Color (i.e. to show the change in the color of the text/image in terms of making the object light/bright, etc.)

Motion Tween works only on symbols and will not work oh layers, which contain more than one symbol. Shape modification is not allowed in motion tweening.

Shape Tweening: Shape Tweening is used when the change in the shape of the object is required to be shown. For example, shape tweening can be used to show the conversion of a circle to a semicircle. Shape Tweening doesn't work on symbols.

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PROJECT WORK

Answer the following questions:

1. What is the difference between a Frame and a Keyframe?
2. What is the extension of a Flash file? Why do we need .swf file?
3. Why tweening is required in animation?
4. What is the difference between a Keyframe and a Blank Keyframe?
5. Why we use flash?
6. Explain the following terms: Stage, Scene, Layers and Timeline.
7. Differentiate between Ink Bottle Tool and Paint Bucket Tool.

Lab Work:

1. Make a ball and convert it into smiley using tweening.

PHOTOSHOP

INTRODUCTION

Photoshop is a software for image processing. It is widely used by professional photographers to edit, manipulate and recolour photographs and create special effects draw objects, write text on them.

STARTING PHOTOSHOP

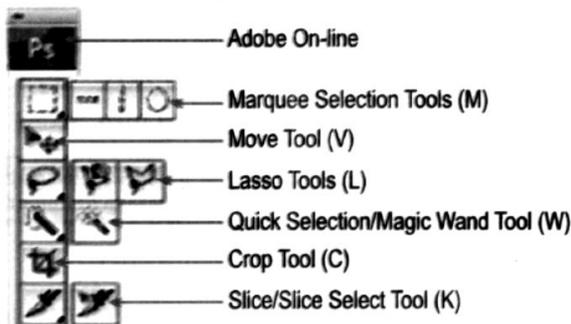
To start Photoshop, follow the given steps:

- Step-1 Click Start button – All Programs.
- Step-2 Click Adobe Photoshop.

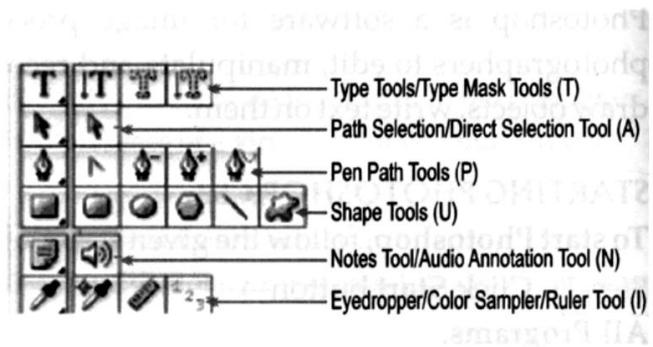
TOOL PALETTE

The tools palette contains tools to draw, paint, and erase. There are four categories of tools in Photoshop's Tools palette:

- Selection Tools
- Path, Text and Shape Tools
- Painting Tools
- View Tools



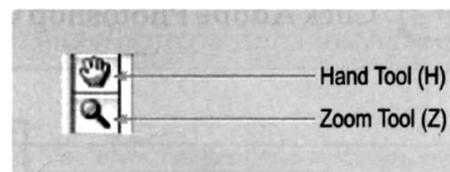
Selection Tools



Path, Text and Shape Tools



Painting Tools



View Tools

CREATING A NEW FILE

To create a new Photoshop image file, follow the given steps:

- Step-1)* Click on File menu.
- Step-2)* Click on New option.
- Step-3)* In the New dialog box that appears, specify the details (Name, Size, Resolution, Background Contents, Color Mode) and click on OK button.

A new blank image file is created. Now, you can use the tools and create your own drawing.

SAVING FILE

To save your file follows the given steps:

- Step-1)* Click on File menu → Click on the save option → The Save As dialog box appears
- Step-2)* Give the name to the file and Click on the Save button.

OPENING AN EXISTING FILE

Now you can open any existing file or any other saved image in Photoshop.

To open an image, follow the given steps:

- Step-1)* Click on File menu. Click on the open option.
- Step-2)* In the Open dialog box, select the file to open.
- Step-3)* Click Open button.

CLOSING A FILE

To close a Photoshop file, click File menu → close.

EXITING FROM PHOTOSHOP

To exit from Photoshop, click File menu → Exit.

USING PHOTOSHOP TOOLS

Marquee Tools

The Marquee tools are used to select any image.

To select an area of the image, follow the given steps:

- Step-1)* Open the image and right-click on Marquee Tool. Now, select one of the following shapes from the list.
 - Rectangular Marquee Tool
 - Elliptical Marquee Tool
 - Single Row Marquee Tool
 - Single Column Marquee Tool
- Step-2)* Drag the mouse over the image to get the selection.

Lasso Tools

The Lasso Tools are used to make Freehand, Polygon and Magnetic selection.

To select an area of the image, follow the given steps:

- Step-1)* Open the image and right-click on Lasso Tool. Now, select one of the following shapes from the list.
- Lasso Tool
 - Polygon Lasso Tool
 - Magnetic Lasso Tool
- Step-2)* Drag the mouse over the image to get the selection, and release the mouse when the image or part of the image is completely selected.

Move Tool

The **Move Tool** is used to move a selected image from one location to another.

To use Move Tool, follow the given steps:

- Step-1)* Open the image and select the part of the image using anyone of the selection tool. Here, it is Rectangular Marquee Tool.
- Step-2)* Click on the **Move Tool**.
- Step-3)* Place the mouse pointer on the image to move and drag the selected image to another location.

Magic Wand Tool

The Magic Wand Tool is used to select an adjacent area of the same colour in an image. To use the Magic Wand Tool, follow the given steps:

- Step-1)* Open the image and click on the Magic Wand Tool. The shape of the mouse pointer changes to a Magic Wand.
- Step-2)* Click on any part of the image to select all adjacent areas of pixels having the same colour.

Crop Tool

Cropping is the process of removing some part of an image and to create focus on the remaining part.

To use the Crop Tool, follow the given steps:

- Step-1)* Click on the Crop Tool
- Step-2)* Drag over the part of the image you want to crop. Now, to complete the crop, press Enter key. You see the selected image gets cropped.

Brush Tool

The Brush Tool paints with smooth edges. To use Brush Tool, follow the given steps:

- Step-1)* Click the Brush Tool
- Step-2)* Choose Brush Preset (size, style) from Options bar.

Step-3) Click or drag over the image to draw strokes.

Eraser Tool

This tool is used to erase a part of an image. To erase, follow the given steps:

Step-1) Click on Eraser Tool and select the type of eraser from the list :

- Eraser Tool
- Background Eraser Tool
- Magic Eraser Tool

Step-2) Click and drag the mouse over the image to erase.

Paint Bucket Tool

The Paint Bucket Tool is used to fill or paint an entire selection.

To use Paint Bucket Tool, follow the given steps:

Step-1) Click on the Paint Bucket Tool.

Step-2) Choose the colour from Color Palette and click anywhere on the canvas to coat the canvas with the colour.

Type Tool

Type Tool is used to add text in a Photoshop file. To add text, follow the given steps:

Step-1) Click the Type Tool.

Step-2) Click inside the canvas and type the text. Once your text is entered, you can change the font style, size, colour, bold, underline, italics, etc. using the Options bar.

Retouching Tools

Tools that help in editing an image are referred as the Retouching tools. These tools can be used on the complete image or on a selected part of the image.

Let us discuss two commonly used Retouching tools.

Spot Healing Brush Tool

This tool helps to fix image imperfections such as scratches, blemishes, dark spots, etc.

To use Spot Healing Brush Tool, follow the given steps:

Step-1) Open the file to be edited and select Spot Healing Brush Tool .

Step-2) Choose a brush size from the Options bar.

Step-3) Click over the spots to fix imperfections in the image .

Healing Brush Tool

This tool also helps to fix imperfections but is different from the Spot Healing Brush tool as it requires to make a selection or define a source point before using it.

To use Healing Brush Tool, follow the given steps:

- Step-1) Open the file to be edited and select the Healing Brush Tool.
- Step-2) Choose a brush size from the Options bar.
- Step-3) Press Alt key and click on the image to define a source point.
- Step-4) Click over the image to fix imperfections in the image.

Clone Stamp Tool

The Clone Stamp Tool is used to create a duplicate copy of one part of an image over another part of the same Image.

To use Clone Stamp Tool, follow the given steps:

- Step-1) Open the image and select Clone Stamp Tool.
- Step-2) Use Alt key and click to define a source point.
- Step-3) Drag the mouse at the place where the clone is to be created.

COPYING AND PASTING SELECTION

Copy and Paste option is used to copy the selected part of the image to other location.

To copy and paste, follow the given steps:

- Step-1) Select a part of an image using any of the selection tool.
- Step-2) Click Edit Menu → Copy option.
- Step-3) Create a new file using File → New.
- Step-4) Now, click Edit Menu → Paste option.

LAYER

Photoshop layers are like transparent sheets stacked on top of each other to create the final image. You can change one layer without affecting the other layers or the background of the image. Layers create larger files but separate portions of the image, therefore making the work easier.

The layer palette shows a small thumbnail view of image in the layers palette.

CREATING A NEW LAYER

A new layer is created when you paste any object in your in your image.

To create a new layer, follow the given steps:

- Step-1) Click the Layer menu, select New → click the Layer option. The New Layer dialog box appears.
- Step-2) In the Name text box, type the desired name. Click OK.

RENAMING LAYER

To rename a layer, follow the given steps:

- Step-1) Select the layer from Layers palette and click Layer Properties from the Layer menu
- Step-2) In the dialog box that appears, type a new name for the layer and click OK.

DELETING A LAYER

To delete a layer, follow the given steps:

- Step-1) Select the layer you want to delete from Layers palette and click Layer Menu → Delete → Layer option.
- Step-2) In the confirmation dialog box that appears, click Yes.

HIDING AND SHOWING A LAYER

To hide a layer, click on the eye icon that is the foremost left column of the layers palette.

To show a layer, click in the leftmost column to bring back the eye icon.

The order of the layers affect the image displayed.

MERGING LAYERS

Merging layers means to combine the visible layers into a single layer.

To merge different visible layers, click Layer menu → Merge Layers option.

FILTERS

Filters help to give special effects to the picture or selected portion of it.

Types of Filters

There are 11 main categories of filters in Photoshop:

- Artistic
- Blur
- Brush Strokes
- Distort
- Render
- Stylize
- Noise
- Sharpen
- Texture
- Pixelate
- Sketch
- Video

To apply a filter, follow the given steps:

- Step-1) Open the image.
- Step-2) Choose any category from Filter menu. If a dialog box appears, click OK to see the effect.

Filter Gallery

The **Filter Gallery** helps you to apply filters and view the thumbnail image of the change that appears, which you may accept by clicking **OK**.

- Step-1) Click on Filter menu and choose Filter Gallery.
- Step-2) Choose the filter type from the gallery.
- Step-3) Click OK to apply the filter.

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PROJECT WORK

Answer the following questions:

1. What is Photoshop?
2. What are retouching tool?
3. How do you hide a layer?
4. Write the steps to use healing brush tool?
5. How do you apply filter to an image?
6. Open an image of flowers and use the Magic Wand tool to select one flower. Use this selection to make a bouquet of flower by pasting on new image file with black background.