COMPUTER GRAPHICS

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Photo editors allow us to create and modify bitmap-based graphics and photographic images. This includes tasks such as painting and drawing, color correction, photo enhancement, creating special effects, image conversion and adding a text to graphics. There are different types of photo editing software like Adobe Photoshop, Paint Shop, Photo matrix, Adobe Photoshop Express etc.

Adobe Photoshop

Adobe Photoshop is one of the most popular professional graphic editing software packages. It offers a large number of filters and plug-ins which enable us to add cool effects to images. It has a premium set of image transformation tools. Among other things, the latest Photoshop version comes with enhanced vector graphics and 3D editing capabilities.

Advantages of Photoshop

Many tools are available for photo editing.
We can re-size, crop, change color and background along with the brightness of pictures by the use of Photoshop.
We can save edited photo with the different extension like ".psd", ".jpg" and ".bmp".

How to open Photoshop?

Step 1 Click on start button
Step 2 Click on program
Step 3 Click on Adobe
Step 4 Window of Adobe Photoshop will open

How to create new Canvas?

The drawing canvas is the area in which you will create or modify images. Different steps should be followed to create new canvas:
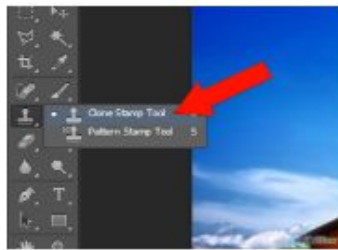
Step 1 Click on file menu
Step 2 Click on New button
Step 3 Choose the size of canvas according to your need.
Step 4 Click on OK button
Step 5 New canvas is created
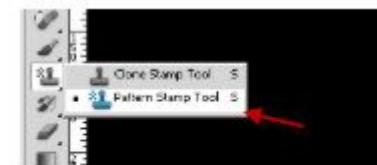
TOOLS USED IN PHOTOSHOP

Clone Stamp Tool

It is used to copy a specific part of an image to another part of the image. Generally, it is used to mix a part of an image to another image.

How to use clone stamp Tool?

Open an image.
Click on the Clone Stamp Tool.
Set the diameter of the pointer.
Click on the mouth of the open image by pressing the Alt key.
Make a new layer.
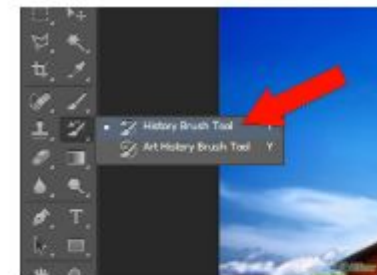Drag the selected part by the mouse in the new place.
Resize image by pressing Ctrl+T

Pattern Stamp Tool

It is used to fill color in the border side of an image or set the pattern in the vacant space.

How to use pattern stamp tool?

Open the necessary photo.
Click on the pattern Stamp Tool.
Click on pattern picker.
Select the desired pattern.
Now, you can paint the image by dragging the mouse.

History Brush Tool

This tool is used to restore the image destroyed by Air History Brush Tool.

How to use History Brush Tool?

Open the necessary image.
Click on the History Brush Tool.
Set the necessary properties of the pointer such as diameter, mode, opacity, style etc.
Click and move the mouse pointer to the necessary part of the image.

History Brush Tool

This tool is used to restore the image destroyed by Air History Brush Tool.

How to use History Brush Tool?

> Open the necessary image.
> Click on the History Brush Tool.
> Set the necessary properties of the pointer such as diameter, mode, opacity, style etc.
> Click and move the mouse pointer to the necessary part of the image.

Art History Brush Tool

This tool is used to destroy an image or dramatically change the appearance of an image.

How to use Art History Brush Tool?

> Open the necessary image.
> Click on the Art History Tool.
> Set the necessary properties of the pointer such as diameter, mode, opacity, style etc.
> Click and move the mouse pointer to the necessary part of the image.

How to use Art History Brush Tool?

> Open the necessary image.
> Click on the Art History Tool.
> Set the necessary properties of the pointer such as diameter, mode, opacity, style etc.
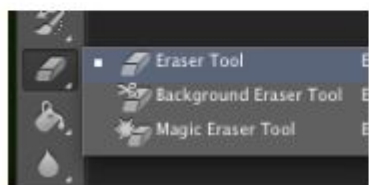> Click and move the mouse pointer to the necessary part of the image.

Eraser Tool

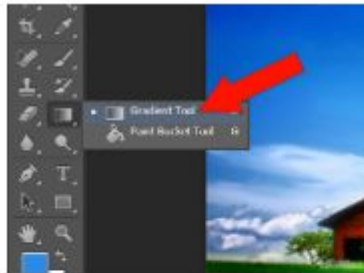This tool is used to rub the unnecessary part of an image.

How to use Eraser Tool?

> Open the necessary image.
> Click on Eraser Tool.
> Set the necessary properties of the eraser tool such as diameter, mode, opacity, style etc.
> Click and drag the mouse pointer to the required part of the image.

Gradient Tool

This tool is used to fill or set the mixing color in the background of an image.

How to use Gradient Tool?

> Open the necessary image.
> Create a new layer.
> Click on Gradient Tool.
> Set the properties such as mode, opacity, etc.
> Click on Gradient picker.
> Select the desired gradient and click on the OK button.
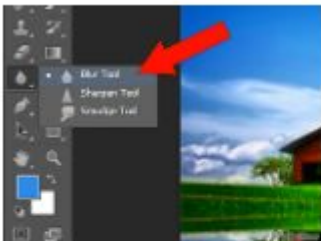> Click and drag the mouse pointer on the image.

Paint Bucket tool

This tool is used to fill or set the color style in an image according to our requirement.

How to use Paint Bucket Tool?

> Open the necessary image.
> Set the foreground color.
> Click on Paint Bucket Tool.
> Set the properties such as mode, opacity etc.
> Click on the place where you want to fill or set the color or pattern.

Blur Tool

This tool is used to give fine or bright finishing to an image.

How to use Blur Tool?

> Open the necessary photo.
> Click on Blur Tool.
> Click and drag the mouse pointer to the necessary part of the image.

Sharpen Tool

This tool is used to reverse the things done by blur Tool.

How to use Sharpen Tool?

Open the necessary image.
Click on Sharpen Tool.
Set the properties such as mode, opacity etc.
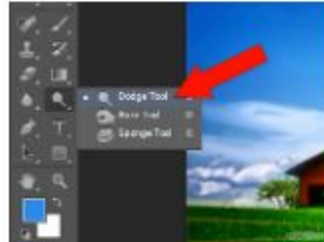Click and drag the mouse pointer to the necessary part of the image.

Smudge Tool

This tool is used to band the specific hole of the image such as to close the open mouth, to close the open eye etc.

How to use Smudge Tool?

Open the necessary image.
Click on Smudge Tool.
Set the properties such as mode, opacity etc.
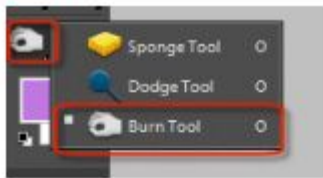Click and drag the mouse pointer to the necessary part of the image.

Dodge Tool

This tool is used to put the light on the dark part of an image.

How to use Dodge Tool?
Open the necessary image.
Click on Dodge Tool.
Set the properties such as mode, opacity etc.
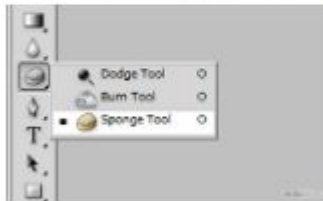Click and drag the mouse pointer to the necessary part of the image.

Burn Tool

This tool is used to make an image dark or dim.

How to use Burn Tool?

Open the necessary image.
Click on Burn Tool.
Set the properties such as mode, opacity etc.
Click and drag the mouse pointer to the necessary part of the image.

Sponge Tool

This tool is used to make an image black and white.

How to use Sponge Tool?

Open the necessary image.
Click on Sponge Tool.
Set the properties such as mode, opacity etc.
Click and drag the mouse pointer to the necessary part of the image.

Type Tool

This tool is used to type the text or a new layer on an image.

How to use Type Tool?

Open the necessary image.
Select the Horizontal Type Tool to type horizontally or select the Vertical Type Tool to type vertically.
Set the properties such as font style, size etc.
Start to type your matter.

Set the color in Type Text

       Open the necessary image.
       Type the text using Type Tool.
       Click on the Set the color text.
       Set the desired dialog box.
       Click on the OK button.

Wrapping the Text

       Open the necessary file.
       Type the text using Type Tool.
       Click on the Wrapped Text Button.
       Select the appropriate style from the style dialog box.
       Set the other properties from the dialog box.
       Click on the OK button.

Cropping the image

       Choose the image
       Click on the crop tool
       Select the required area and drag the mouse
       The rectangular box appears at the place of selection
       Click enter
       Save the cropped image with an appropriate name

Pixel

The full form of the pixel is picture element. With the help of, the individual dots the display screen LCD monitor, CRT monitor projects the image. The amount of pixel in the monitor determines the quality of the image. The more is the number of the pixel the quality of the image improves. The display screen is divided according to length and breadth which is called resolution. A single screen can hold hundred thousands of pixel.

Image Size

The image size is determined by its length and breadth. Normally, image size is measured with the help of pixels but using different graphical programs we can measured in centimeter and inches. The graphical substance can help us to resize and resample the image size.

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Resizing Image

Open the photo
Click on the image menu
Click on the image size
Select the required length and breadth of the image. (It may bring change in the pixels and percentage of the image)
Click on the OK button

Note: Increase in size may cause the blurring of the image.

Adding text on the image

Open the image
Click on the text tool from the tools option
Click on the side of the image where you want to write
If necessary change the image size, color, font, etc.

Photo Cloning

Open the required image
Select Clone tool
Click on the Alt key on the keyboard and drag the mouse to the area where the photo needs to be cloned
Drag the mouse in any part of the photo so that you can see the cloned photo

Removing the unnecessary part of the photo

Open the photo
Click on the erase tool
Click and drag the mouse so the unnecessary parts can be erased showing the background

Raster Image

The image which is formed by the grouping of pixels is called the raster image. Due to high pixel volume, raster image has relatively larger file size. These images can be compressed withoutchanging its quality but cannot be enlarged without decreasing in quality. The images that are captured by digital camera are raster image and has '.bmp', '.tif', ',tf', '.jpg', etc. as its extension.

VectorGraphics

Vector graphics uses the line as its base to create images instead of the pixel. Vector graphics can be enlarged without reducing its quality. Vector graphics takes slight less space than bitmapimage. It has '.ai', '.aps', '.svg', '.drw' as its extensions.

Use of internet to store images

There are various formats of pictures available on the internet. The picture size matters due to the bandwidth used to upload and download the picture. The size of the picture must be smaller so that we can easily upload or download the picture. Though we are using the smaller sized picture, the quality of the picture must be maintained. Photoshop provides us with various options to save the files. The original file is saved under '.psd' file format. This format can later be saved under '.gif', '.jpg', '.png' to upload it on the internet.

Page Layout

The articles or the pictures that means to be printed can be managed under the screen called page layout. Page layout can enhance the article or picture according to the situation and there is various software available for page layout. Some of them are: Indesign, Page plus, Quark Xpress, Page maker, Free hand.

Qualities of page layout

It manages the print quality of the article or image.
Page format alignment can easily be maintained.
As per requirement, we can introduce new column or page number in that article.
The layout of the image can be resized without decreasing its quality.

Areas covered by Page layout

It is mostly used in desktop publishing.
New paper writing, article writing, browser, invitation card uses page layout.
Designing hoarding board, large scale advertisement and designing flexes requires page layout.

Pre-Press

After the document goes to [page layout, the process of pre-press starts. The process of preparing digital documents for printing in the press is called pre-press. The pre-press includes verification of data in the document, correcting language mistakes, managing page number according to printing plates, etc. as its work.