Image Size

Canvas Size

Crop and Trim

Color Models

Rotation

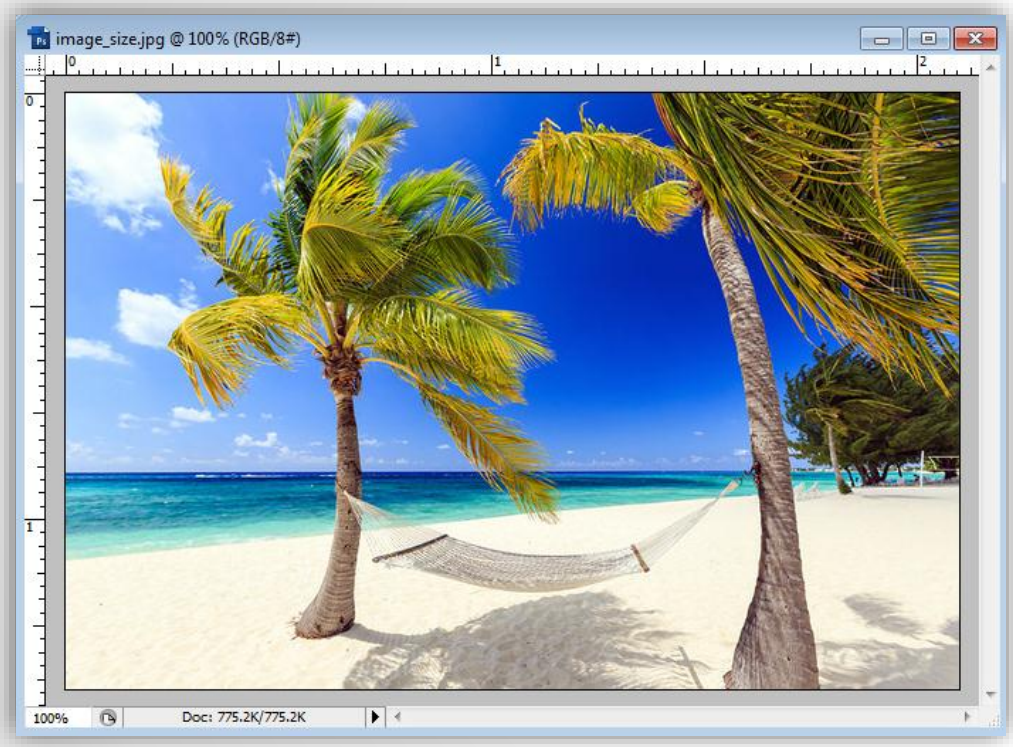
Adjustments

Chapter 3
Image Settings

Image Size

- The *Image Size* command changes the number of pixels used to create the image. By changing pixel dimensions in the image size dialog box, you can change the size of your image. To open the image size dialog box: ***Image -> Image Size (Ctrl+Alt+I).***
- Now you will change the image size of a picture. The image size of picture is **630x420**. To make it smaller we need to change the width and height. The constrain proportions option automatically changes the width as you change the height, and vice versa. So if we change the width to **360** the height will be **240** automatically.

Image Size


image_size.jpg @ 100% (RGB/8#)
100%
Doc: 775.2K/775.2K

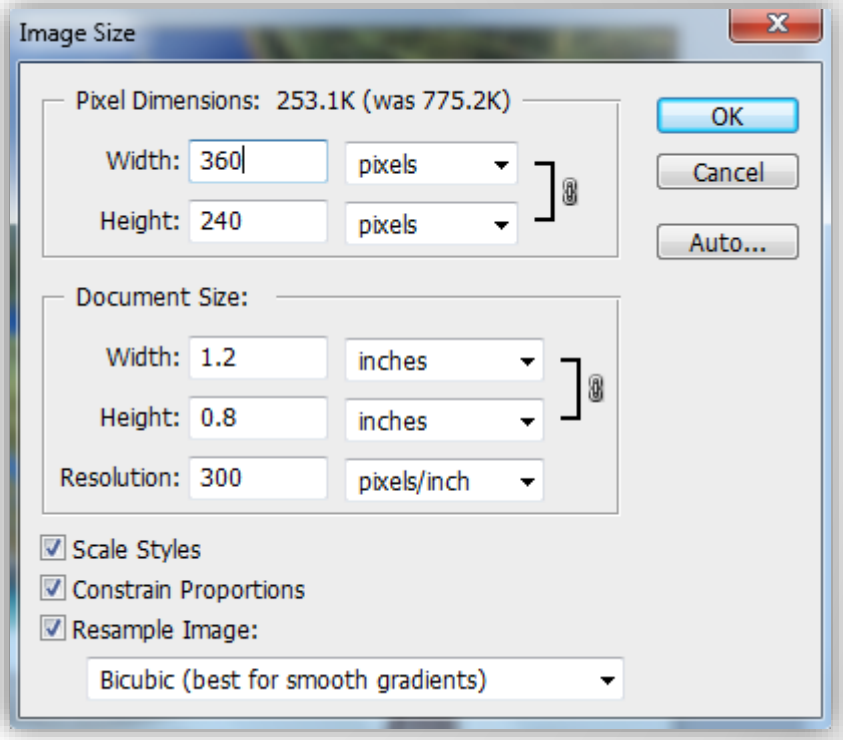
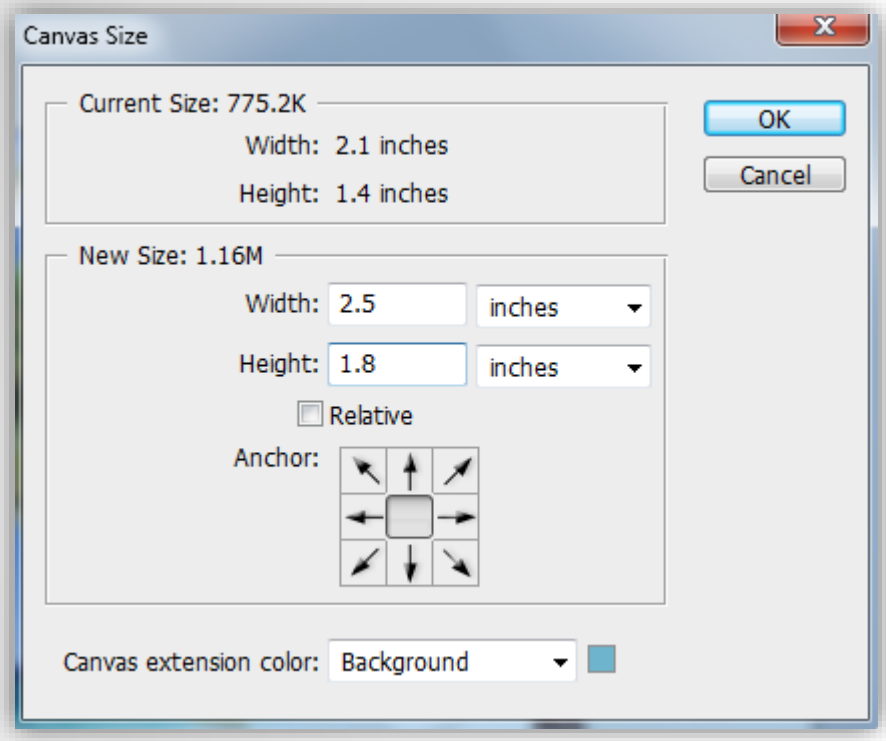


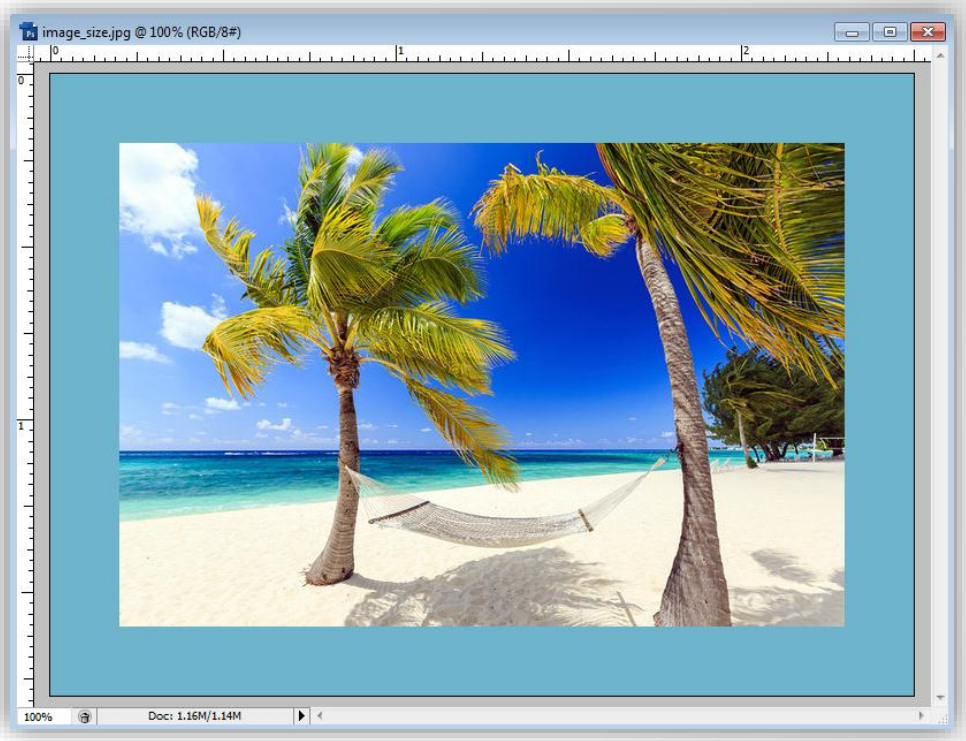
Image Size
Pixel Dimensions: 253.1K (was 775.2K)
Width: 360 pixels
Height: 240 pixels
Document Size:
Width: 1.2 inches
Height: 0.8 inches
Resolution: 300 pixels/inch
Scale Styles
Constrain Proportions
Resample Image:
Bicubic (best for smooth gradients)
OK
Cancel
Auto...

Canvas Size

- The ***Canvas Size*** command lets you add or remove work space around an existing image. You can also use the ***Canvas Size*** command to crop an image by decreasing the canvas area. If you need more space around your image (border), the *Canvas Size* command is the best way to do this. To access the change canvas size dialog box: ***Image -> Canvas Size***. Enter values for width ***Dialog Box*** and height.

Canvas Size

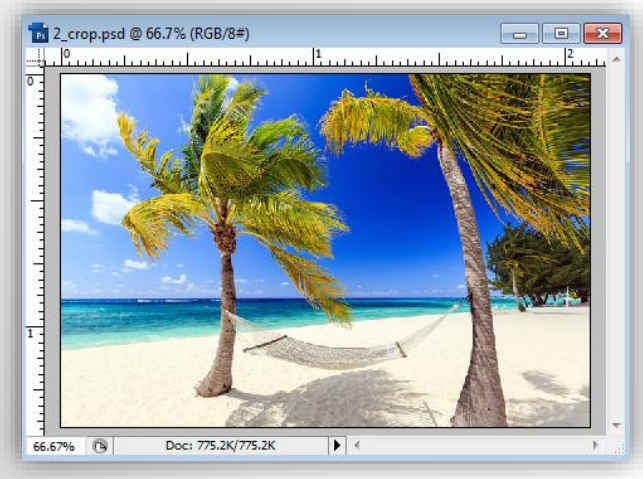




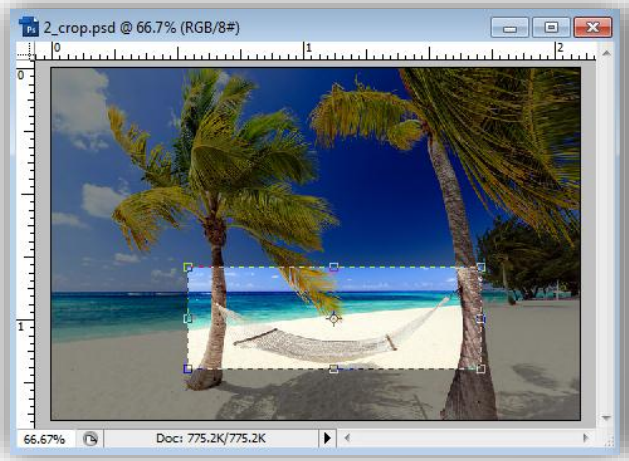
- Click an **Anchor** (arrow) to indicate where to position the existing image on the new canvas. The white square represents the position of the image, the other squares with arrows represents the position of the border. ***Canvas Extension Color*** options defines the color of the border.

Crop

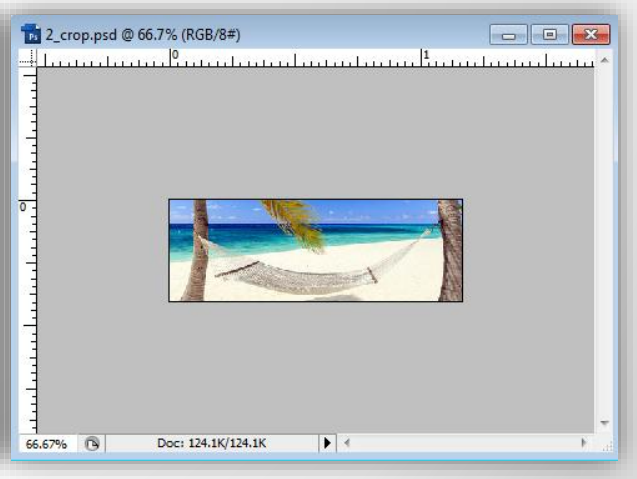
- Cropping deletes part of an image. You can crop an image using the ***Crop Tool*** or the ***Crop*** command. Select the ***Crop Tool*** from the toolbox. Click and drag to define the crop area. When you are happy with the position and the size of the crop area, click the *Commit* button to apply command.
- Use a selection tool to select the part of an image you want to keep and then ***Image -> Crop***.



The original image



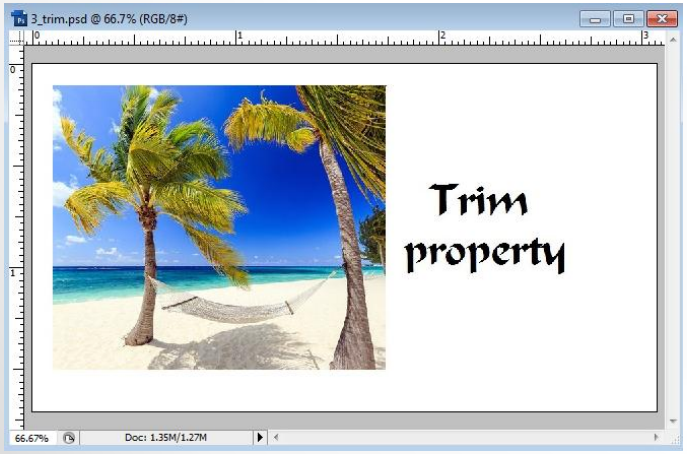
Selecting Crop Area



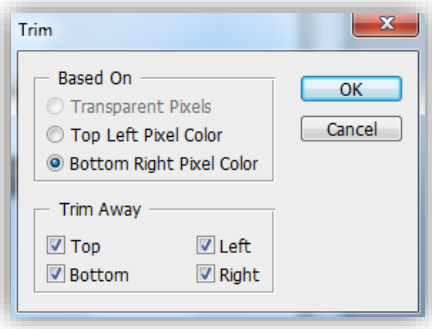
Cropped Image

Trim

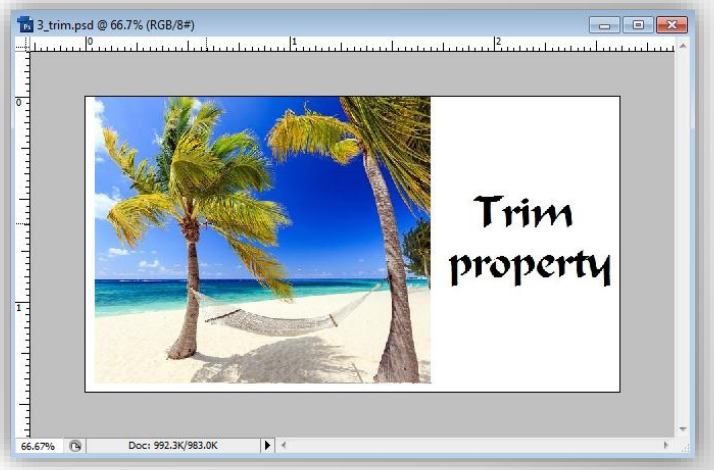
- **Trim** removes surrounding transparent pixels, or background pixels of the color you specify from an image and reduces the image size.
  - 1. Choose ***Image -> Trim***.
  - 2. In the *Trim* dialog box, select an option:
  - 3. Select one or more areas of the image to trim away: Top, Bottom, Left, or Right.
- In the sample below, after trim the white part around image and text is deleted.



The original image



Trim dialog box



Trimmed Image

Rotation

- The ***Rotate Canvas*** commands let you rotate or flip an entire image. The commands do not work on individual layers or parts of layers, paths, or selection borders.
- Choose **Image > Rotate Canvas**, and choose one of the following commands from the submenu :

Rotate 90 CW

Rotate 90 CCW

The original image

Flip Horizontal

Flip Vertical

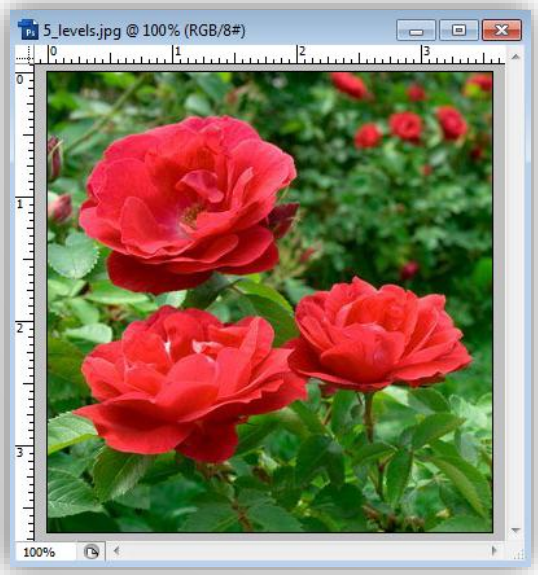
Rotate 180

Adjustments

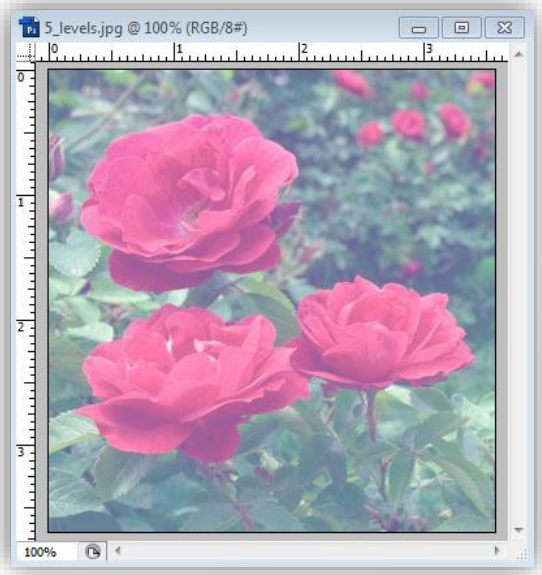
- **Color adjustment** tools work by mapping an existing range of pixel values to a new range of values. Some of the tools work automatically. *Auto Levels*, *Auto Contrast* and *Auto Color* let you automatically adjust tonal range of an image. These tools are usually used to correct color on scanned photos.

Levels

- The *Levels* dialog box lets you correct the tonal range and color balance of an image by adjusting the intensity levels of image shadows, midtones, and highlights.
- The Levels histogram is a visual guide for adjusting the image key tones. ***Image -> Adjustments -> Levels***



Original Image

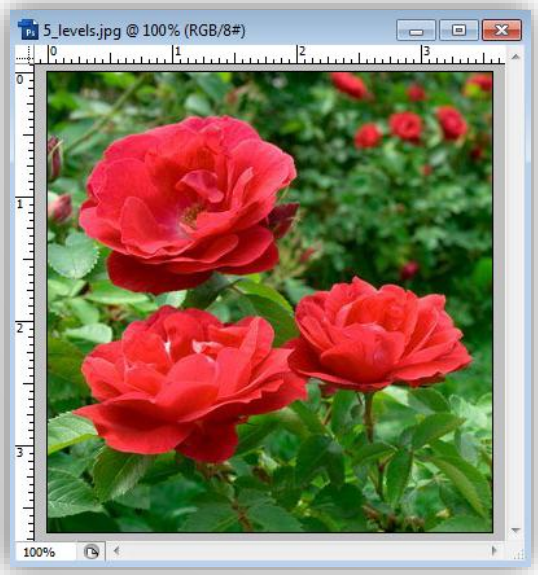


After Applying Levels

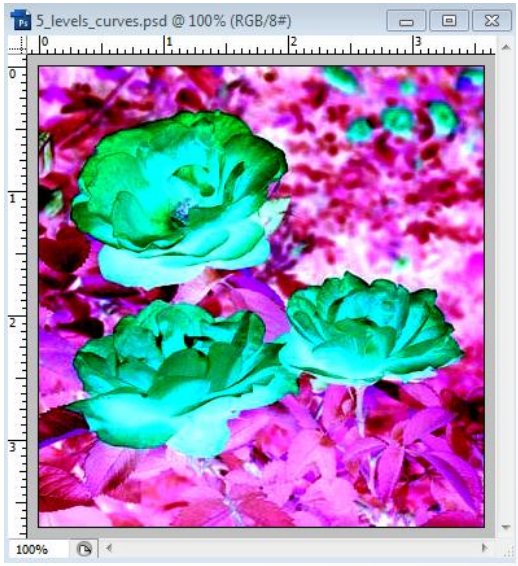
Curves

- The *Curves* dialog box lets you adjust the entire tonal range of an image. But unlike Levels, which has only three adjustments (shadows, midtones, and highlights), Curves lets you adjust up to 14 different points throughout an image's tonal range.

Image -> Adjustments -> Curves



Original Image

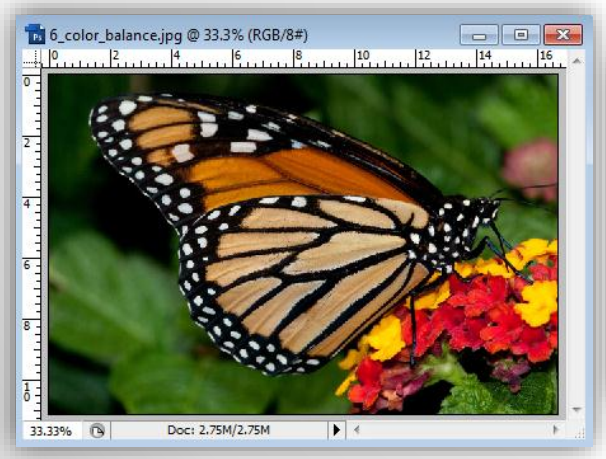


After Applying Curves

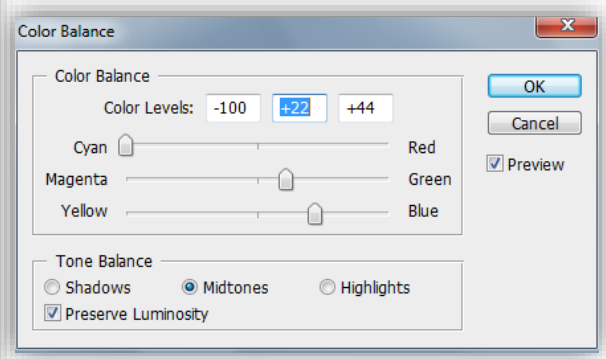
Color Balance

- Photoshop allows you to change the levels of colors within an image. You can adjust the levels of cyan-red, magenta-green and yellow-blue colors.
- If there is too much blue in your image, you can remove blue color by dragging the yellow-blue slider toward yellow.

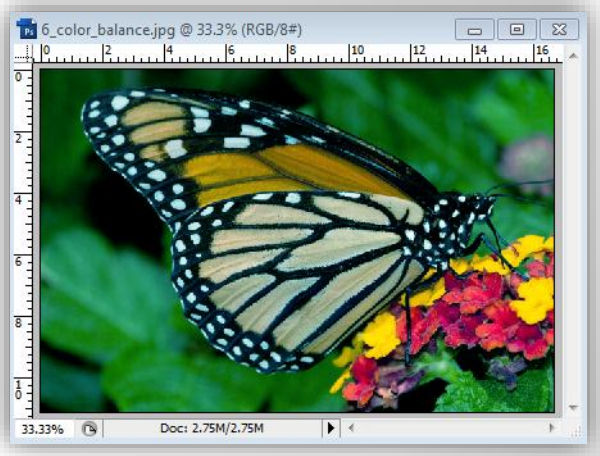
Image -> Adjustments -> Color Balance



Original Image



Color Balance Dialog Box

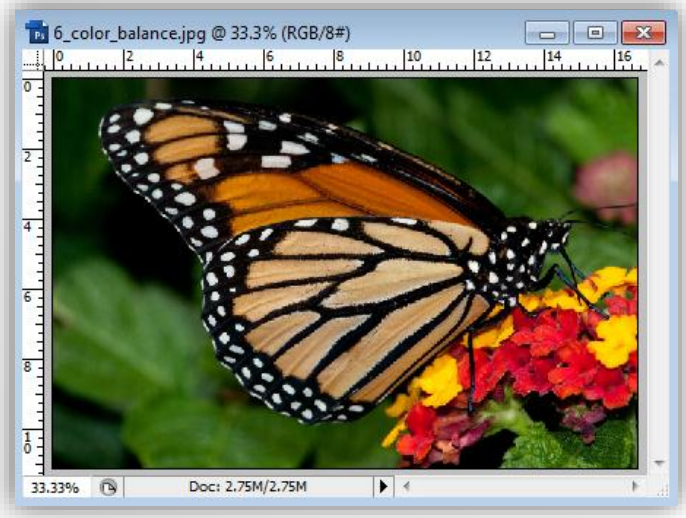


After Applying Color Balance

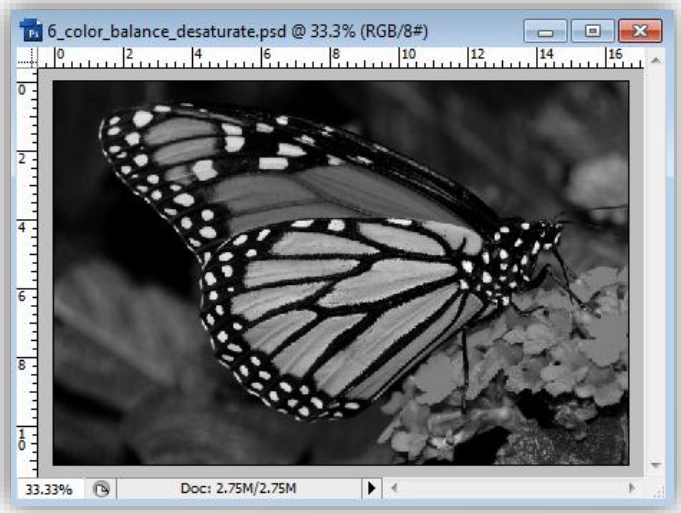
Desaturate

- The *Desaturate* command converts a color image to grayscale values, but leaves the image in the same color mode.
- By changing Color Balance settings you can color the desaturated area.

Image -> Adjustments -> Desaturate



Original Image

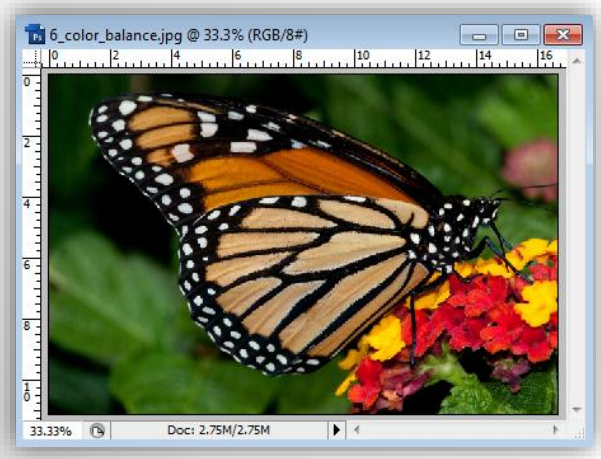


After Desaturating

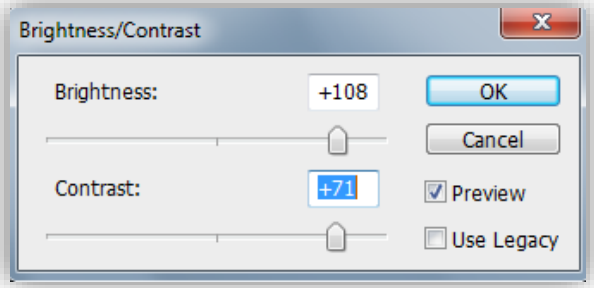
Brightness and Contrast

- The ***Brightness/ Contrast*** command lets you make simple adjustments to the tonal range of an image. Unlike Curves and Levels, which apply proportionate (nonlinear) adjustments to the pixels in an image, *Brightness Contrast* makes the same amount of adjustment to every pixel (a linear adjustment).

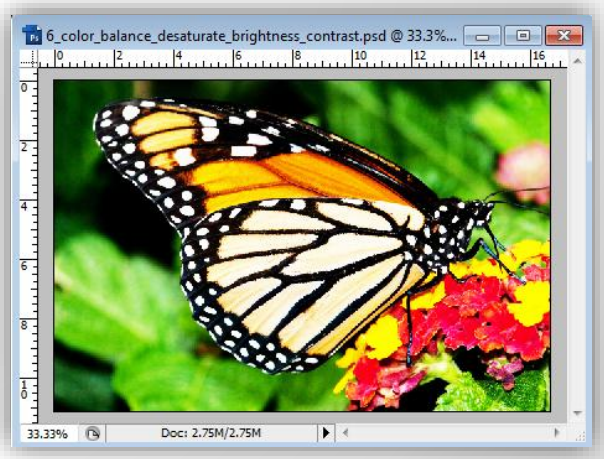
Image -> Adjustments -> Brightness/Contrast



Original Image



Brightness/Contrast Dialog Box



After Applying Brightness/Contrast

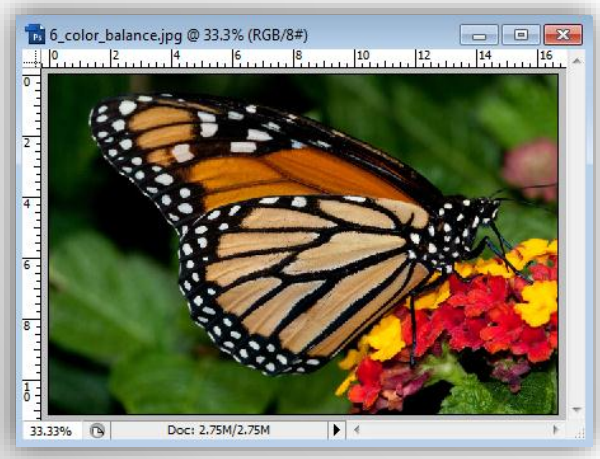
Practice

Modifying a Car by Using Brightness/Contrast

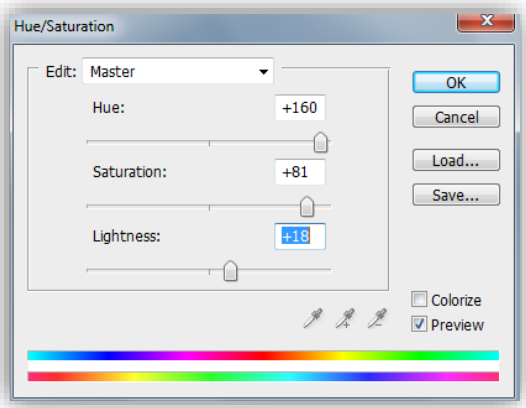
- Open he **car_modify.tif** file.
- By using one of the selection tools, select the hood of the car.
- *Image -> Adjustment -> Desaturate*
- *Image -> Adjustment -> Brightness/Contrast*
- Select less brightness and more contrast to make the picture darker.
- Save as your final image.

Hue and Saturation

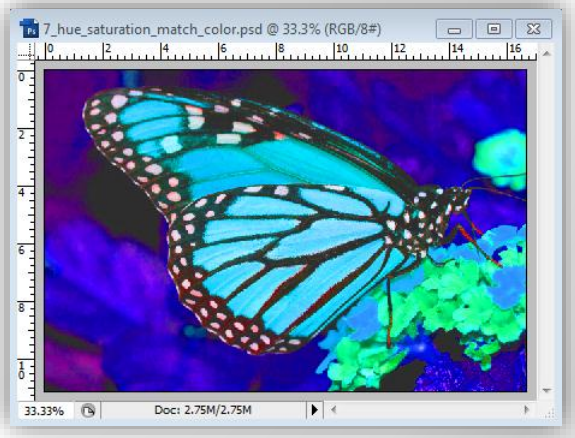
- The ***Hue/Saturation*** dialog box allows us to change colors (hue), enrich or dull colors (saturation), lighten or darken colors (lightness). Hue, saturation and lightness are the three characteristics of light.
- **Hue** is what most people call color. For example, a green car has the hue green. **Saturation** is how pure the hue is. Lightness refers to how bright, or not bright, something is. A light green car and a dark green car have two different lightness values even though the hue is the same. ***Image -> Adjustments -> Hue/Saturation***. If you tick the *colorize* box, it will make the image monotone.



Original Image



Hue/Saturation Dialog Box

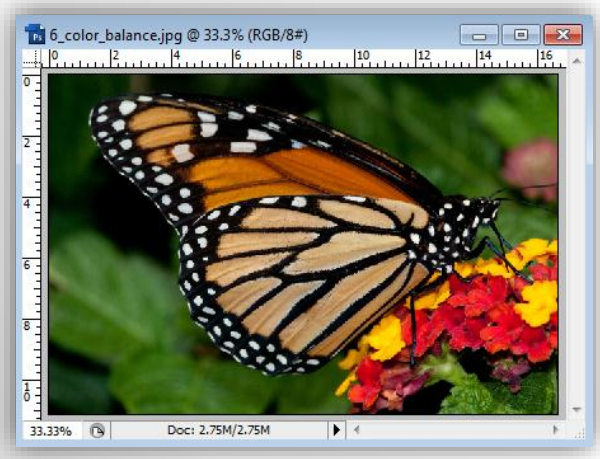


After Applying Hue/Saturation

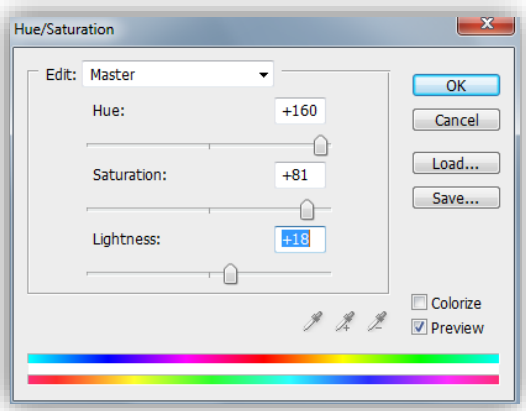
Match Color

- The ***Match Color*** command matches colors between multiple images, between multiple layers, or between multiple color selections. It also lets you adjust the colors in an image by changing the luminance, changing the color range, and neutralizing a color cast. The *Match Color* command works only in RGB mode.

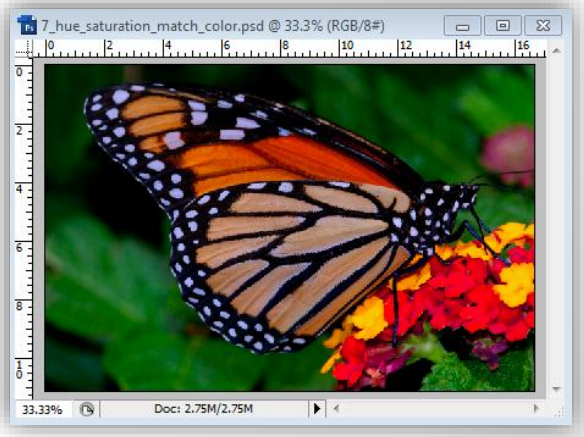
Image -> Adjustments -> Match Color



Original Image



Match Color Dialog Box



After Applying Match Color

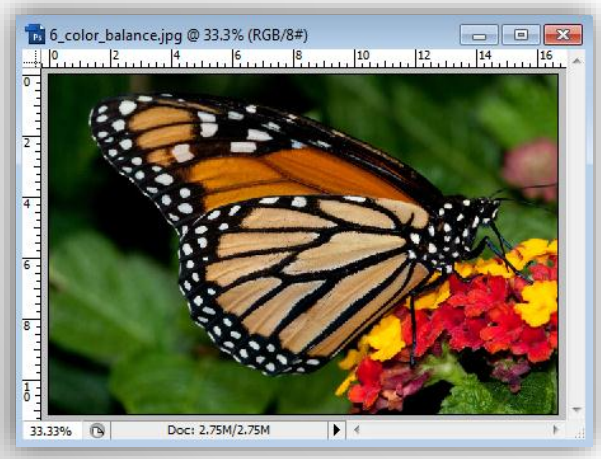
The Shadow/Highlight command

- The ***Shadow/Highlight*** command is suitable for correcting photos with silhouetted images due to strong backlighting or correcting subjects that have been slightly washed out because they were too close to the camera flash. The adjustment is also useful for brightening areas of shadow in an otherwise well-lit image.
- The ***Shadow/Highlight*** command does not simply lighten or darken an image; it lightens or darkens based on the surrounding pixels (local neighborhood) in the shadows or highlights. For this reason, there are separate controls for the shadows and the highlights. The defaults are set to fix images with backlighting problems.

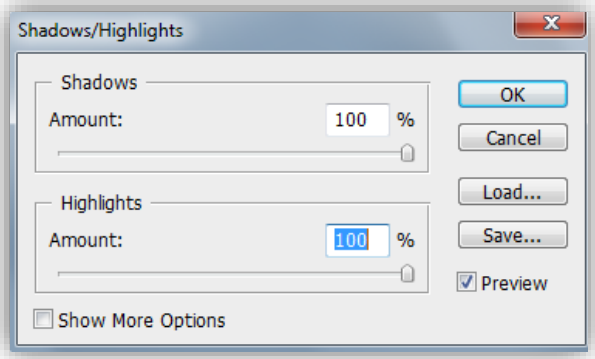
The Shadow/Highlight command

- The *Shadow / Highlight* command also has a Midtone Contrast slider, Black Clip option, and White Clip option for adjusting the overall contrast of the image.

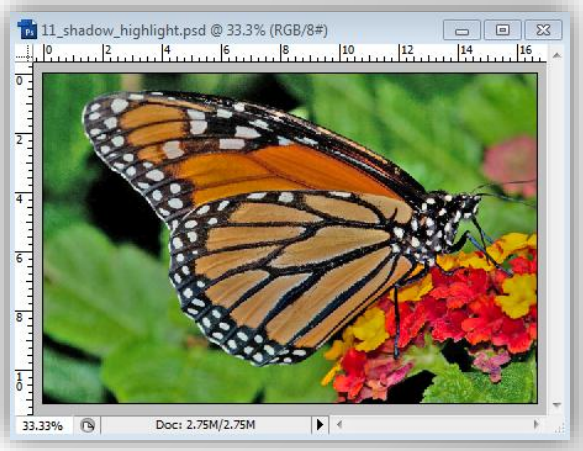
Image -> Adjustments -> Shadow/Highlight



Original Image



Shadow/Highlight Dialog Box

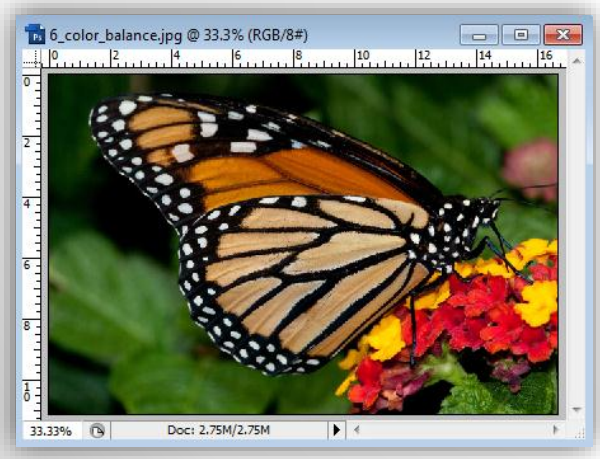


After Applying Shadow/Highlight

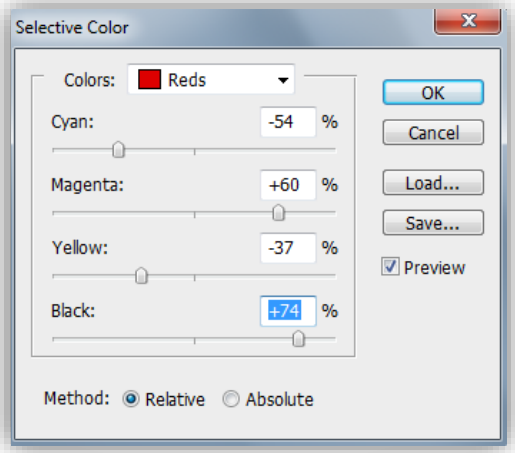
Selective Color

- ***Selective Color*** correction is a technique used by high-end scanners and separation programs to increase and decrease the amount of process colors in each of the additive and subtractive primary color components in an image. Even though *Selective Color* uses CMYK colors to correct an image, you can use it on RGB images as well as on images that will be printed.

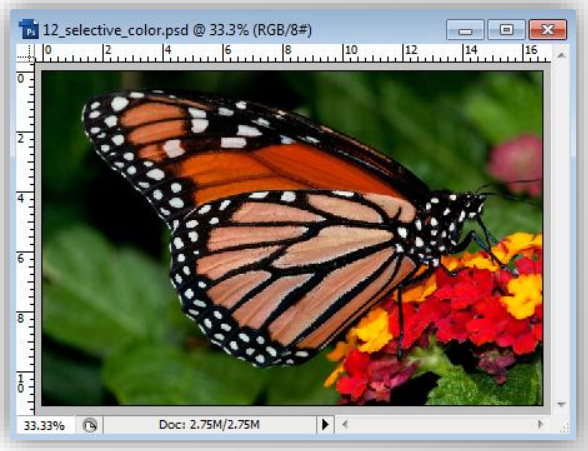
Image -> Adjustments -> Selective Color



Original Image



Selective Color Dialog Box

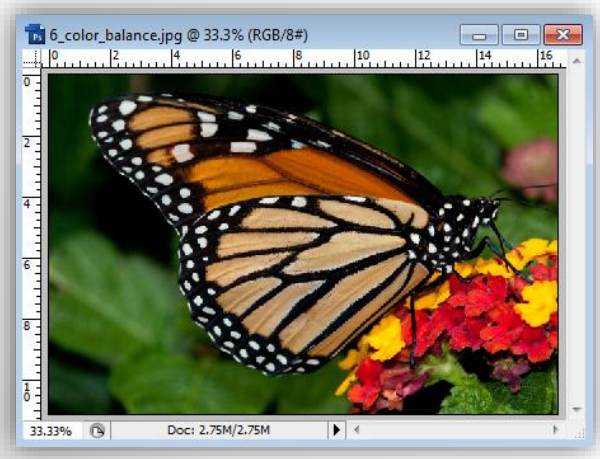


After Applying Selective Color

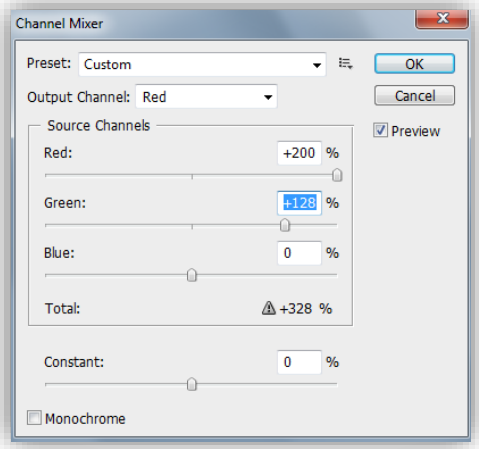
Channel Mixer

- The ***Channel Mixer*** command lets you create high-quality grayscale images by choosing the percentage contribution from each color channel. You can also create high-quality sepia-tone or other tinted images. Using the *Channel Mixer*, you can also make creative color adjustments not easily done with other color-adjustment tools.

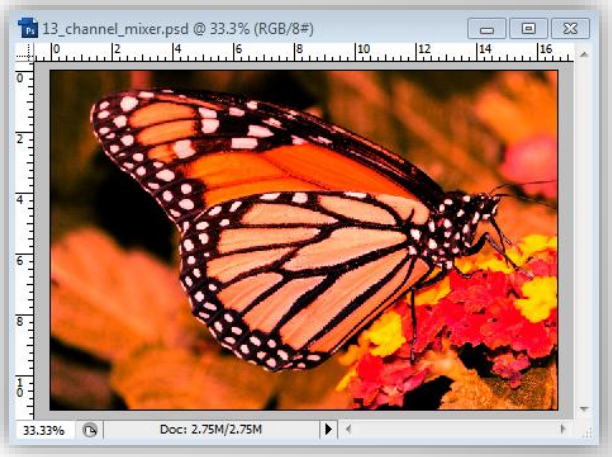
Image -> Adjustments -> Channel Mixer



Original Image



Channel Mixer Dialog Box

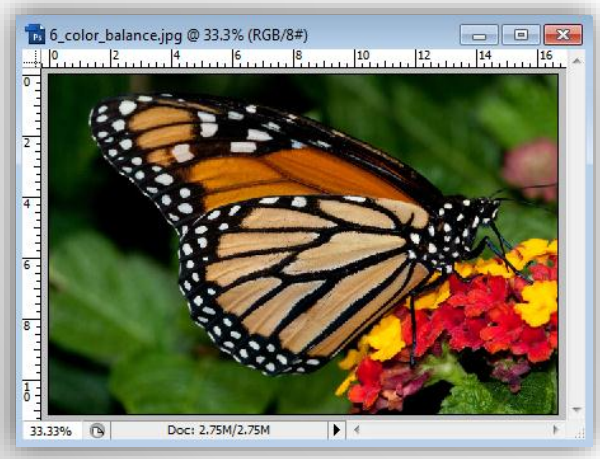


After Applying Channel Mixer

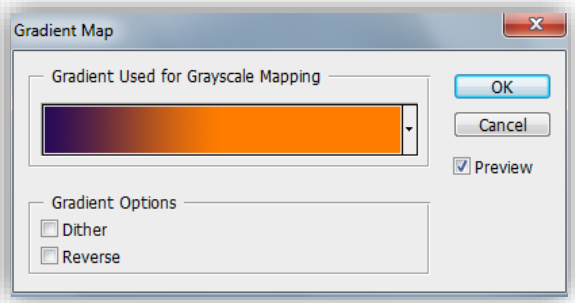
Gradient Map

- Gradient Maps are a great way to add color to a grayscale image, or to fine tune the existing color of an image. This is a handy way of getting a photographic image to have a gradient effect, whereby you can specify the exact colors you would like the image to appear in.

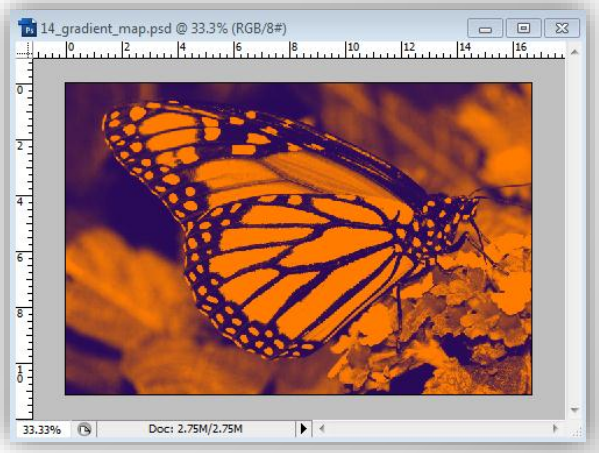
Image -> Adjustments -> Gradient Map



Original Image



Gradient Map Dialog Box



After Applying Gradient Map

Replace Color

- The ***Replace Color*** command lets you create a mask around specific colors and then replace those colors in the image. You can set the *hue*, *saturation*, and *lightness* of the area identified by the mask. The mask is temporary.

After Applying Replace Color

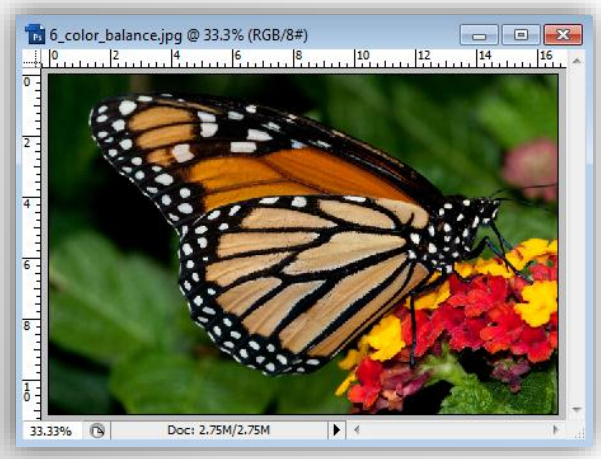
Replace Color Dialog Box

Image -> Adjustments -> Replace Color

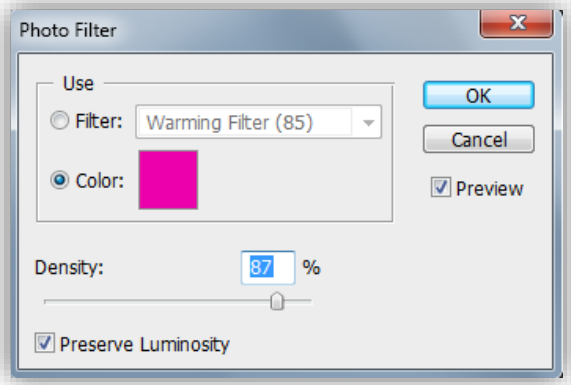
Photo Filter

- The ***Photo Filter*** command mimics the technique of putting a colored filter in front of the camera lens to adjust the color balance and color temperature of the light transmitted through the lens and exposing the film. The ***Photo Filter*** command also lets you choose a color preset to apply a hue adjustment to an image. If you want to apply a custom color adjustment, the *Photo Filter* command lets you specify a color using the Adobe Color Picker.

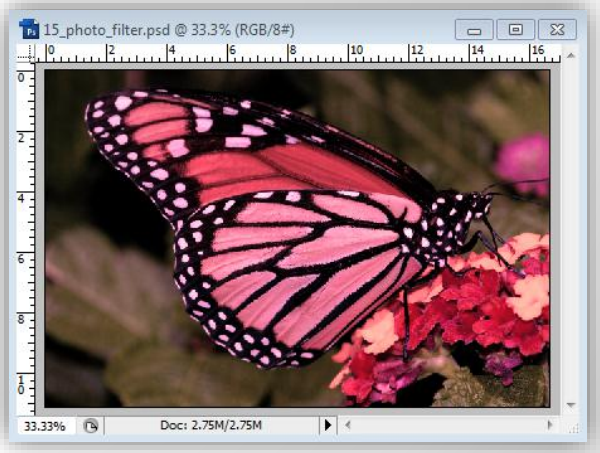
Image -> Adjustments -> Photo Filter.



Original Image



Gradient Map Dialog Box

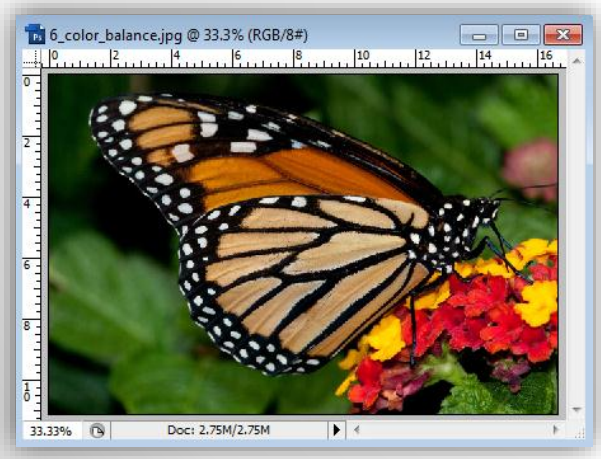


After Applying Gradient Map

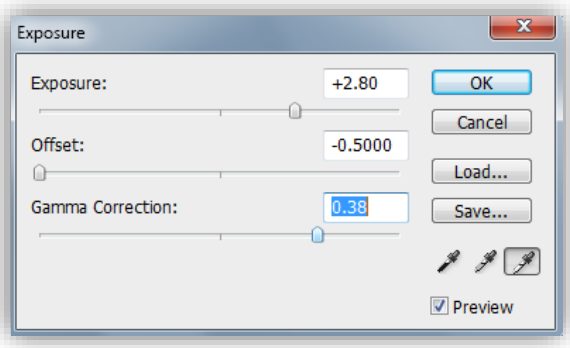
Exposure

- The ***Exposure*** dialog box is designed for making tonal adjustments to HDR images, but it works with 8-bit and 16-bit images. ***Exposure*** works by performing calculations in a linear color space (gamma 1.0) rather than the image's current color space.

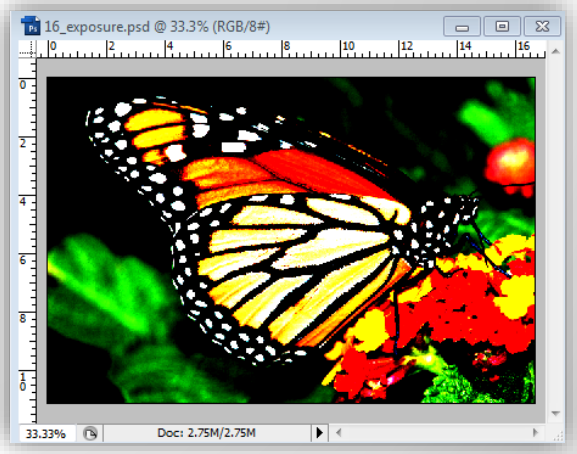
Image -> Adjustments -> Exposure



Original Image



Exposure Dialog Box

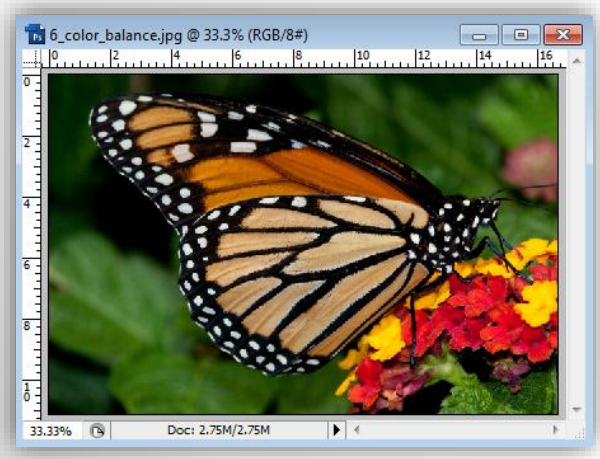


After Applying Exposure

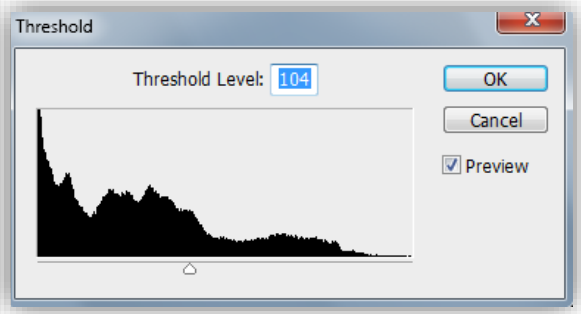
Threshold

- The ***Threshold*** command converts grayscale or color images to high-contrast, black and white images. You can specify a certain level as a threshold. All pixels lighter than the threshold are converted to white; all pixels darker are converted to black. The *Threshold* command is useful for determining the lightest and darkest areas of an image.

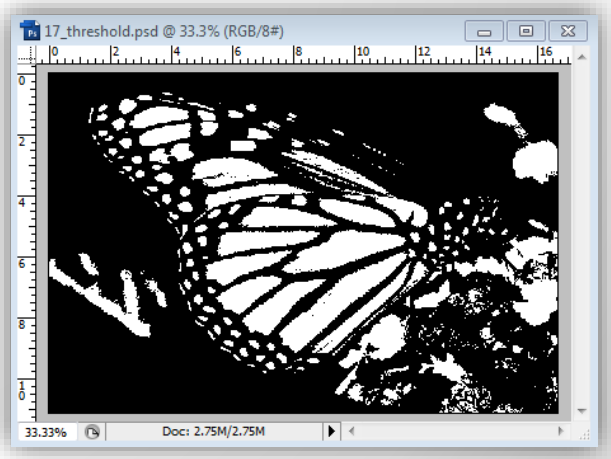
Image -> Adjustments -> Threshold



Original Image



Threshold Dialog Box

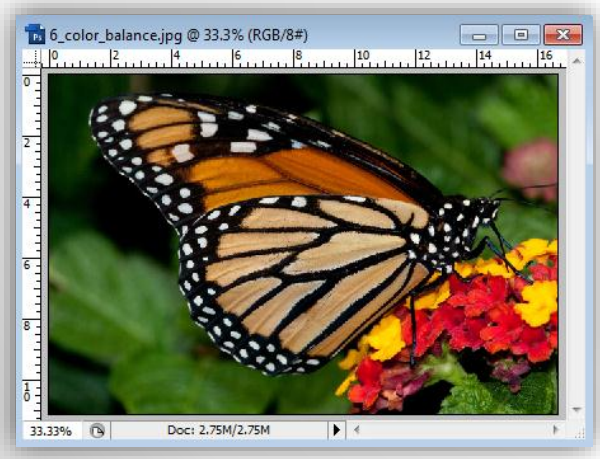


After Applying Threshold

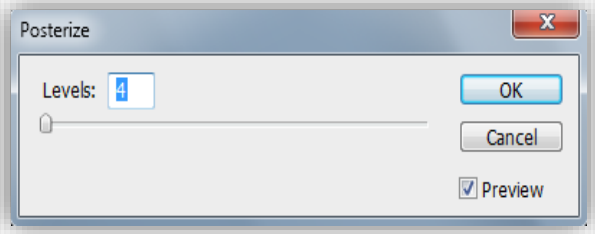
Posterize

- The ***Posterize*** command lets you specify the number of tonal levels (or brightness values) for each channel in an image and then maps pixels to the closest matching level. For example, choosing two tonal levels in an RGB image gives six colors: two for red, two for green, and two for blue. This command is useful for creating special effects, such as large, flat areas in a photograph.

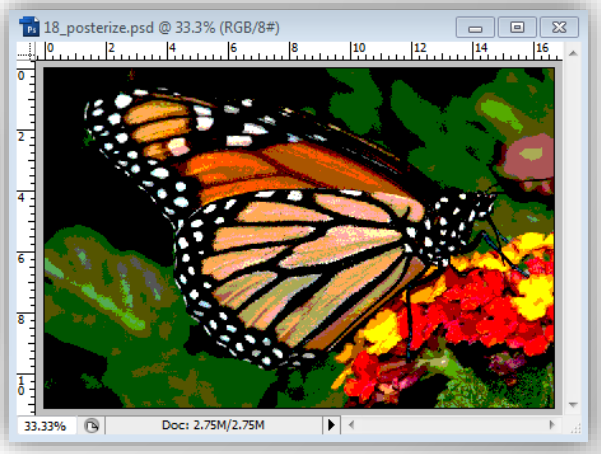
Image -> Adjustments -> Posterize



Original Image



Posterize Dialog Box



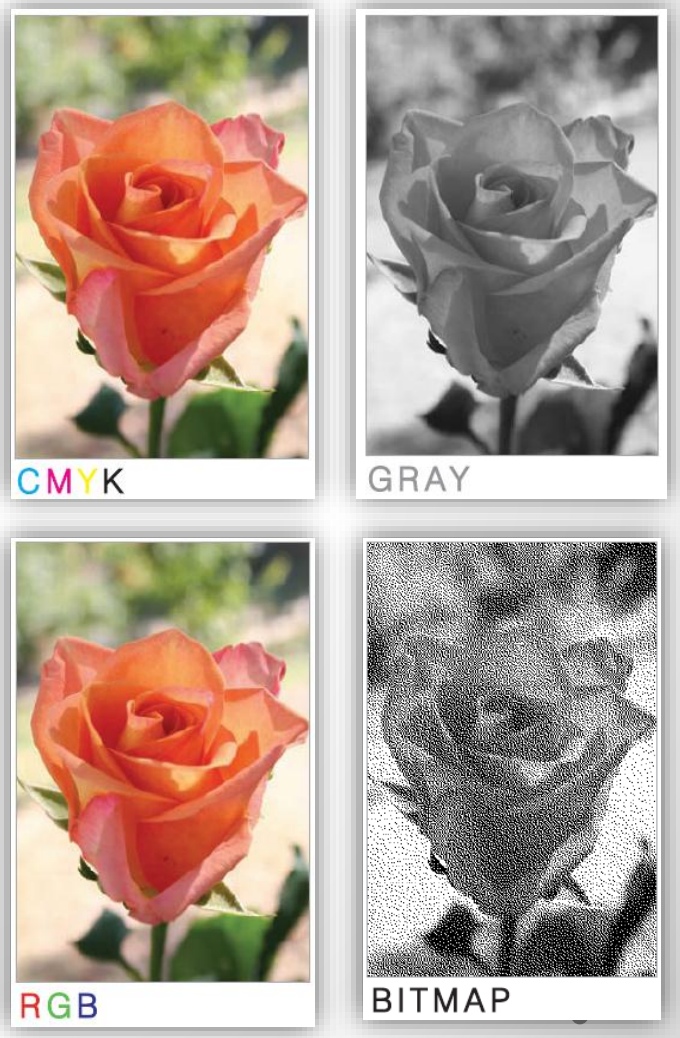
After Applying Posterize

Color Modes

- An image's color mode depends on your purpose. There are eight different image color modes in Photoshop. RGB and CMYK are the two major color modes. Images are usually in RGB mode.
- **RGB** mode is for use on the web, on monitors, on office programs and with most inkjet printers.
- **CMYK** mode is required for publishing.

Color Modes

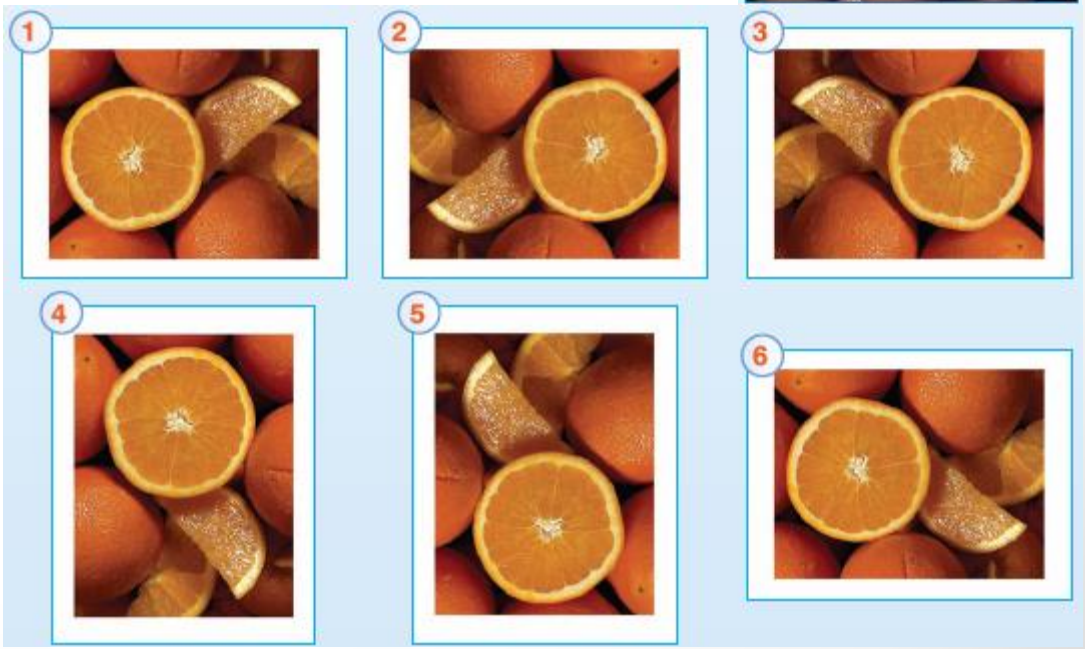
- *Eight Different Color Modes in Photoshop:*
  - Bitmap
  - Grayscale
  - Duotone
  - Indexed Color
  - RGB Color
  - CMYK Color
  - Lab Color
  - Multichannel



Practice

- Open the file oranges.psd and make the following pictures. Use the following features:
  - Crop
  - Canvas size
  - Rotations

Original Image



Practice

- Open the file mountain.psd and make the following changes by using the adjustment tools.


Original Picture

The End

…