

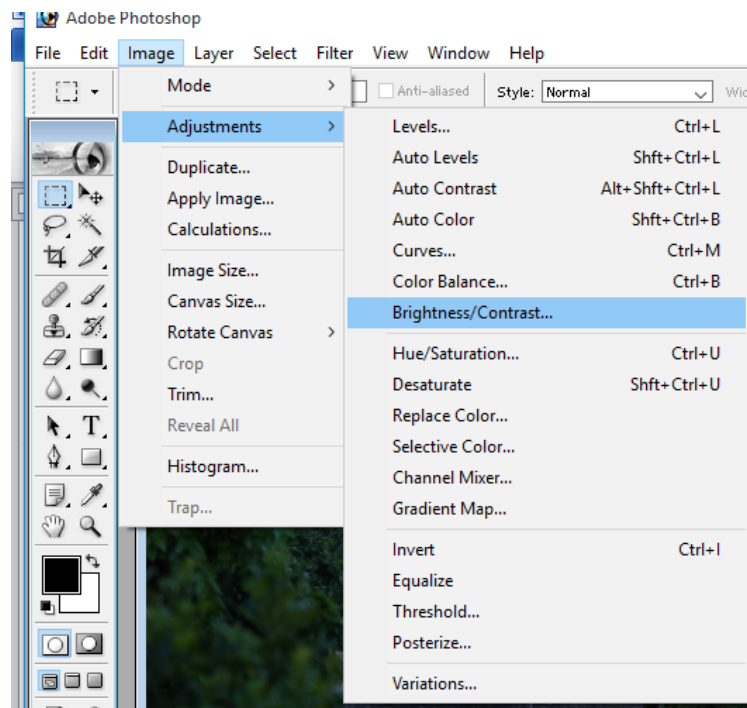
Brightness and Contrast : Make a photo lighter or darker with a simple adjustment.

Sometimes when working with images, you may need to adjust the brightness and/or contrast (especially with scanned images). Adjustments in Photoshop are a group of editing tools that can be used to manipulate several feature like Brightness & Contrast, Vibrance, and Color Balance etc.

If an image (scanned or clicked) is too bright or dark overall, the Brightness/Contrast adjustment may be used to change the tonal range. Increasing the brightness to make the image overall brighter and decreasing the brightness makes image darker. Contrast works by adjusting the bright and dark parts of an image in relation to each other. When the Contrast is decreased, the image becomes grayer and the colors are less sharp. When Contrast is increased, dark areas become darker and bright areas become brighter.

To change the Brightness/Contrast of and image:

- Select “**Brightness/Contrast**” from the “**Adjustments**” >> “**Image**” menu.



- A new window will appear allowing you to slide the brightness and contrast any way you wish. Initially the slider bar stays in the middle for both options with value equal to 0.

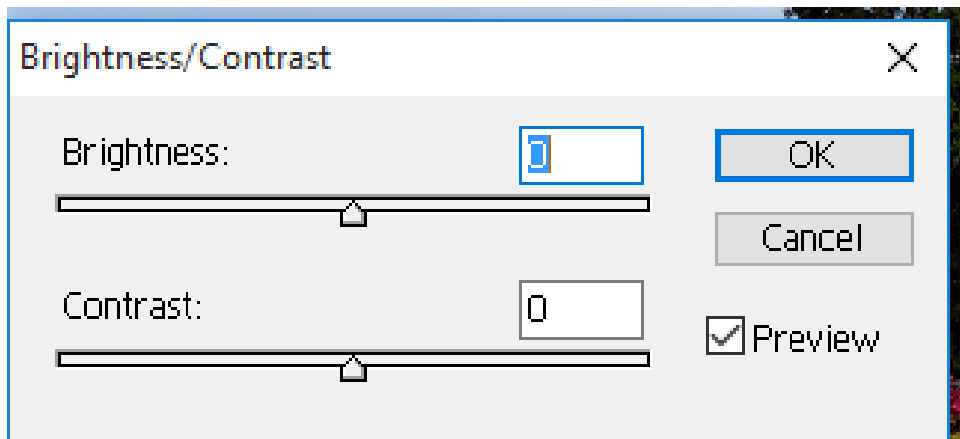
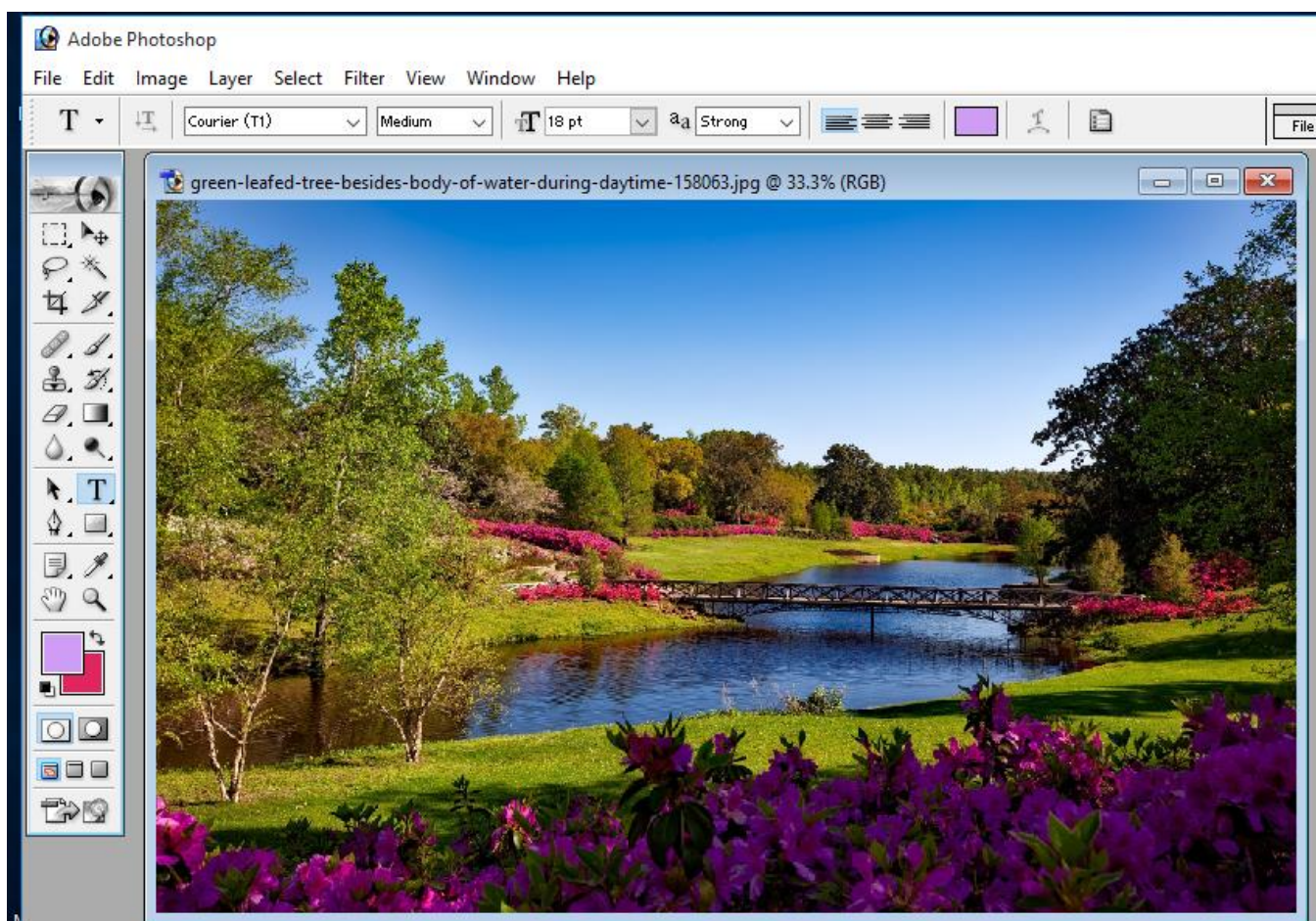


Image without any brightness and contrast adjustment



- Adjust the Brightness slider to change the overall brightness of the image. Adjust the Contrast slider to increase or decrease image contrast.

Image with brightness at +56 and contrast 0

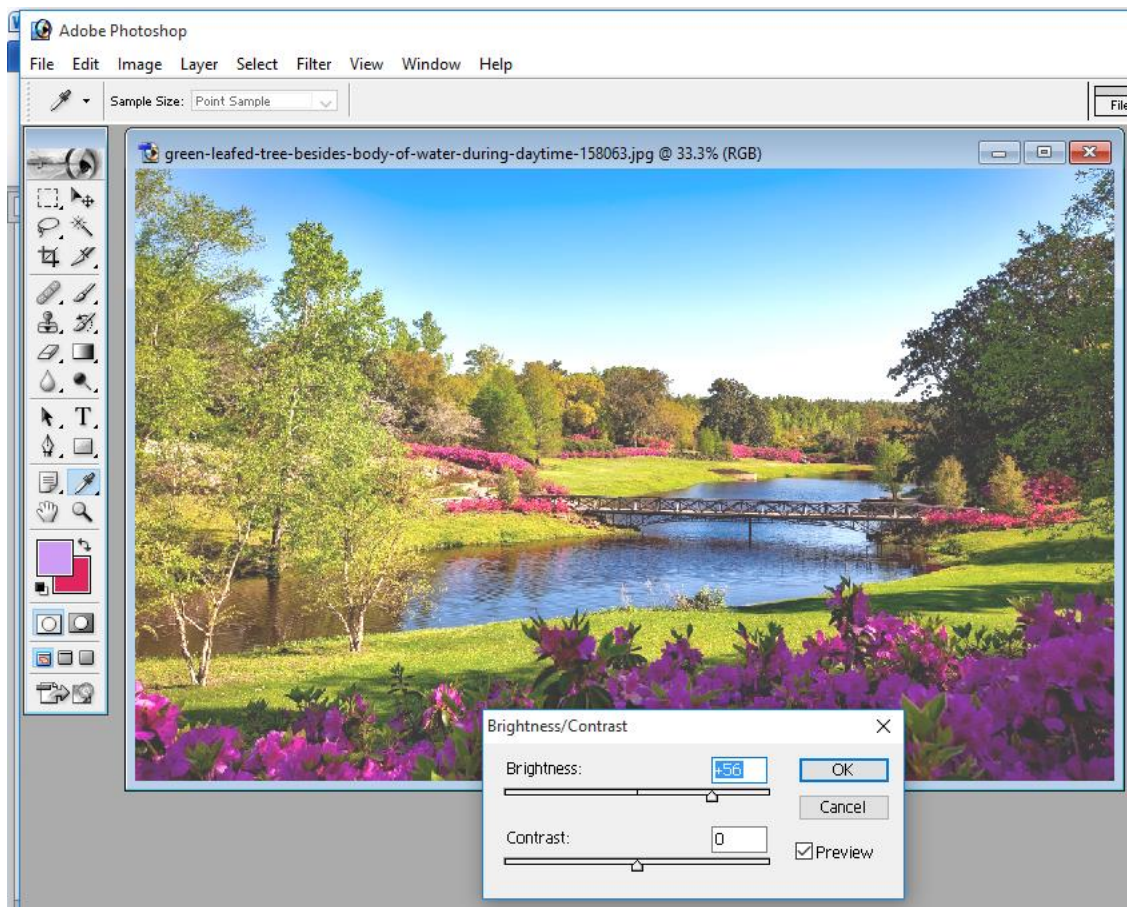


Image with brightness at -53 and contrast 0

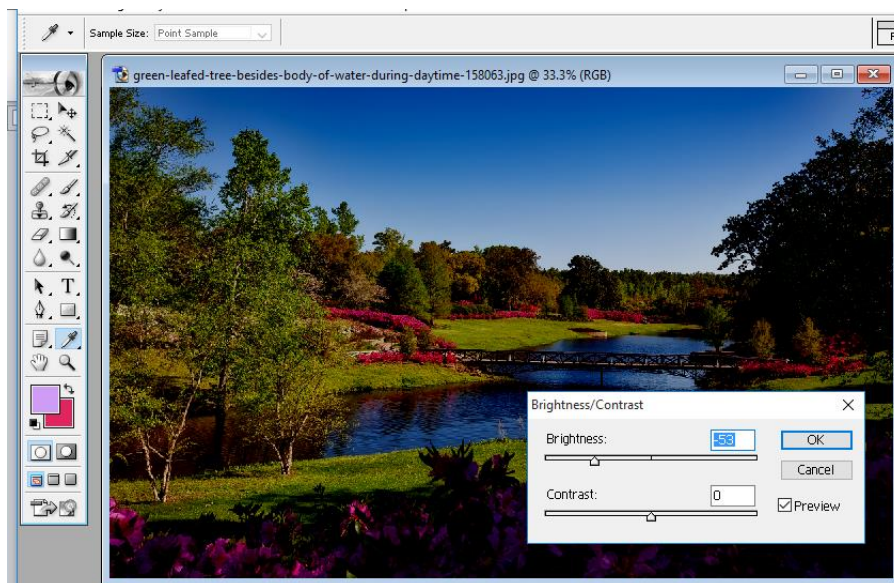


Image with brightness 0 and contrast +52

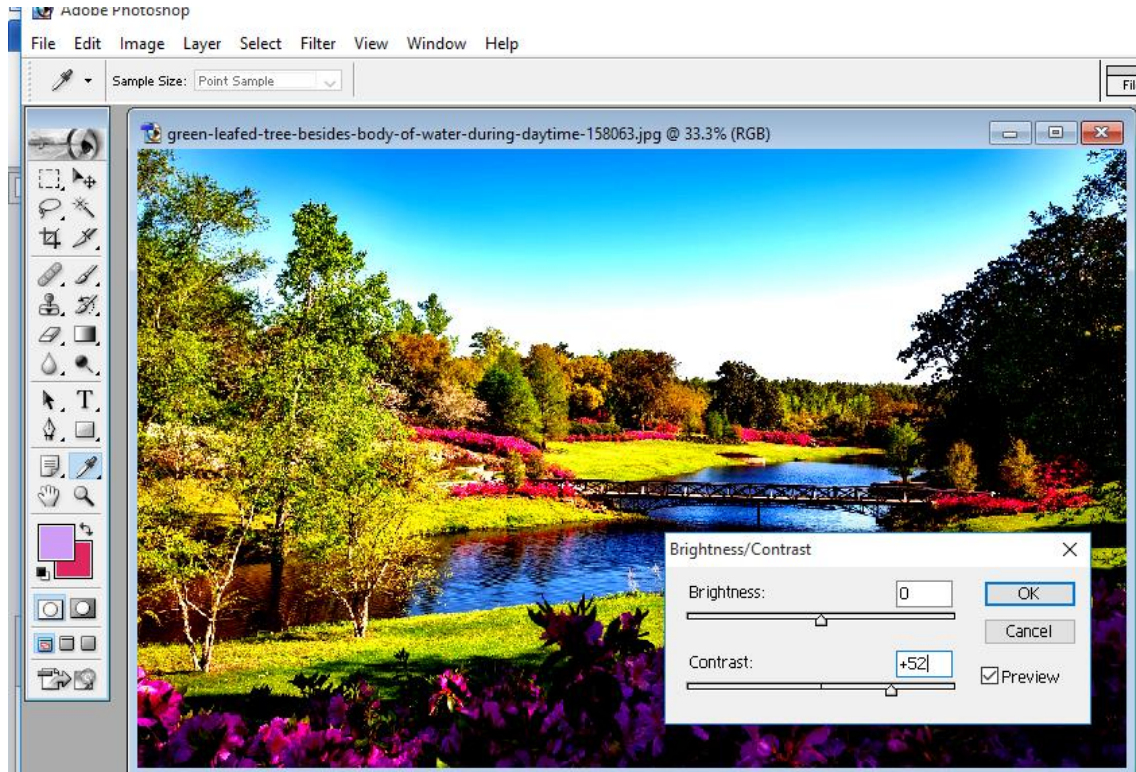
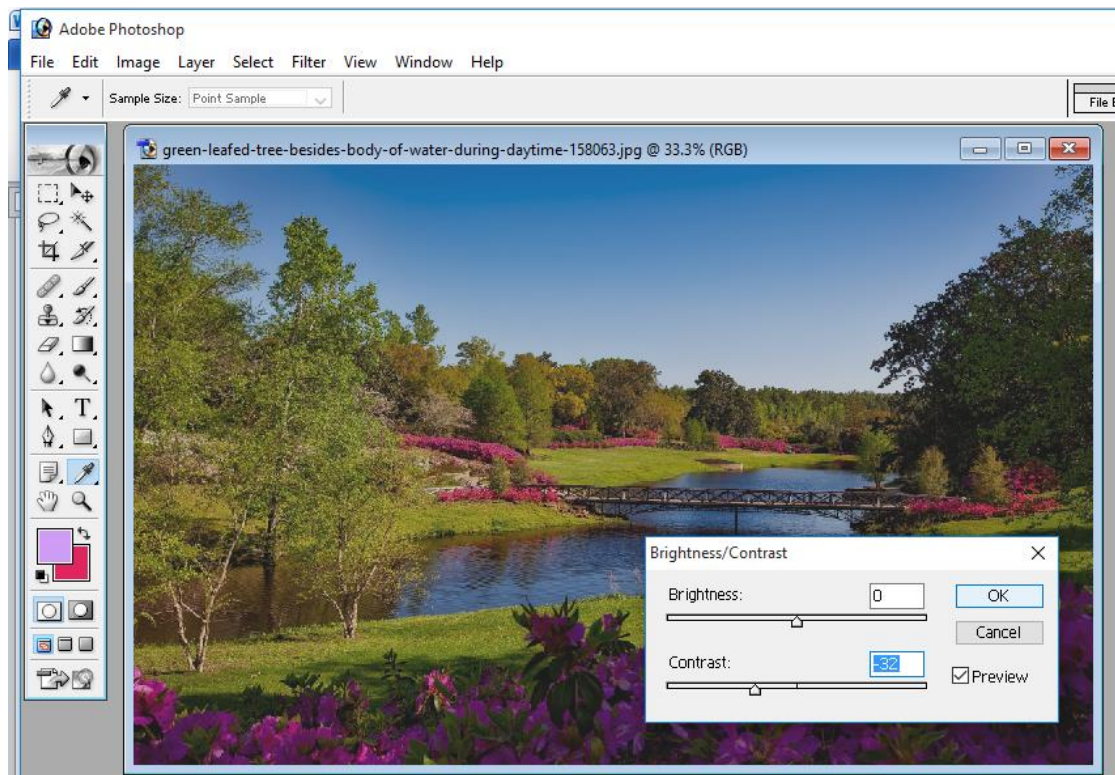


Image with brightness 0 and contrast -32

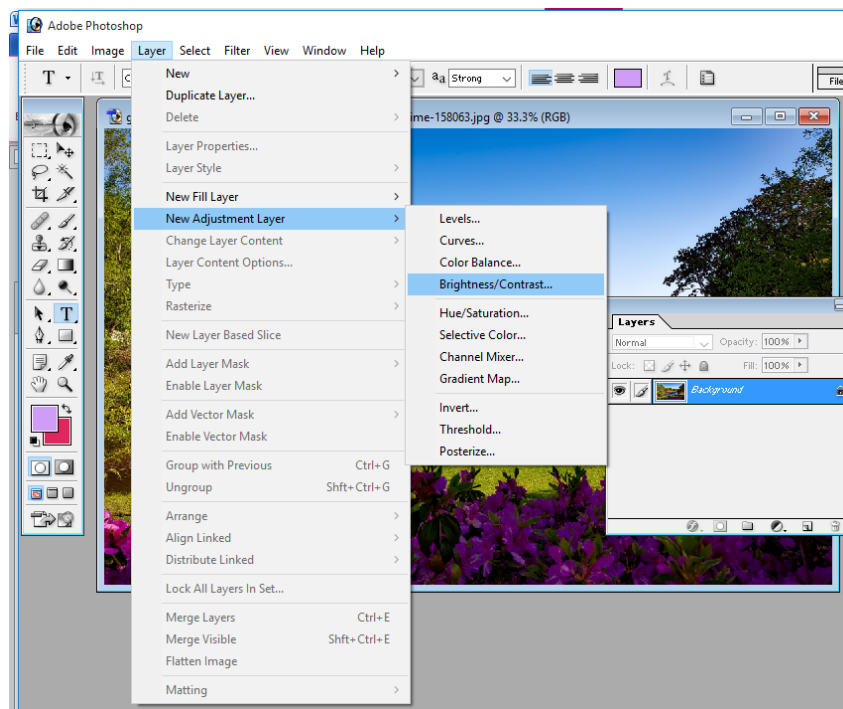


- The Brightness/Contrast adjustment lets you make simple adjustments to the overall tonal range of an image. Adjustments made in here will affect every pixel in your image, unless a selection is made beforehand.
- Moving the brightness slider to the right increases tonal values and expands image highlights, to the left decreases values and expands shadows. The contrast slider expands or shrinks the overall range of tonal values in the image.
- Click OK. The adjustments will appear only on the selected layer.

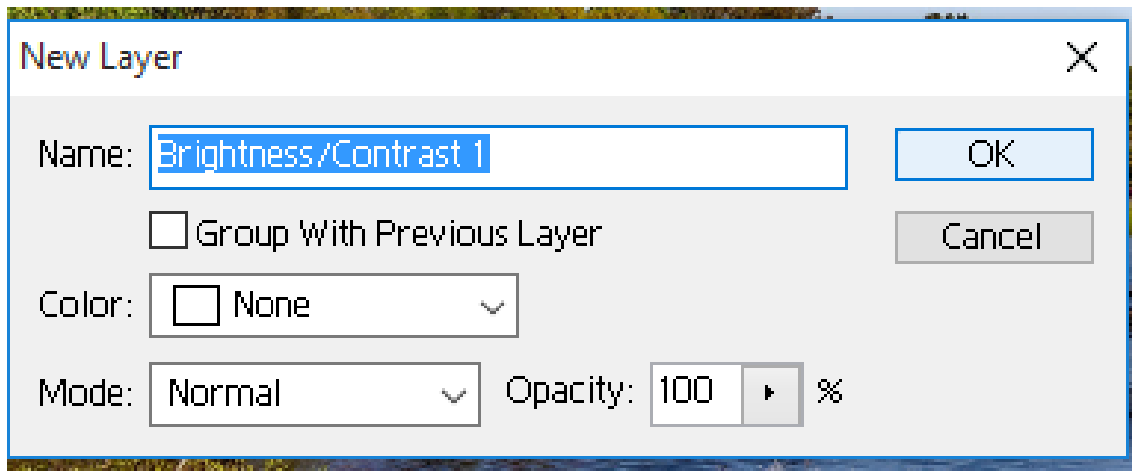
Layer Selection for Brightness/Contrast adjustment

In normal mode, Brightness/Contrast applies proportionate (nonlinear) adjustments to the image layer, as with Levels and Curves adjustments. By default the image layer is selected for adjustments and Brightness/Contrast simply shifts all pixel values higher or lower when adjusting brightness. This causes clipping or loss of image detail in highlight or shadow areas and discards image information, so the Brightness/Contrast adjustments in image layer is not recommended for atleast photographic images. To overcome this, it is suggested to do all Brightness/Contrast adjustments on a new adjustment layer. To do so,

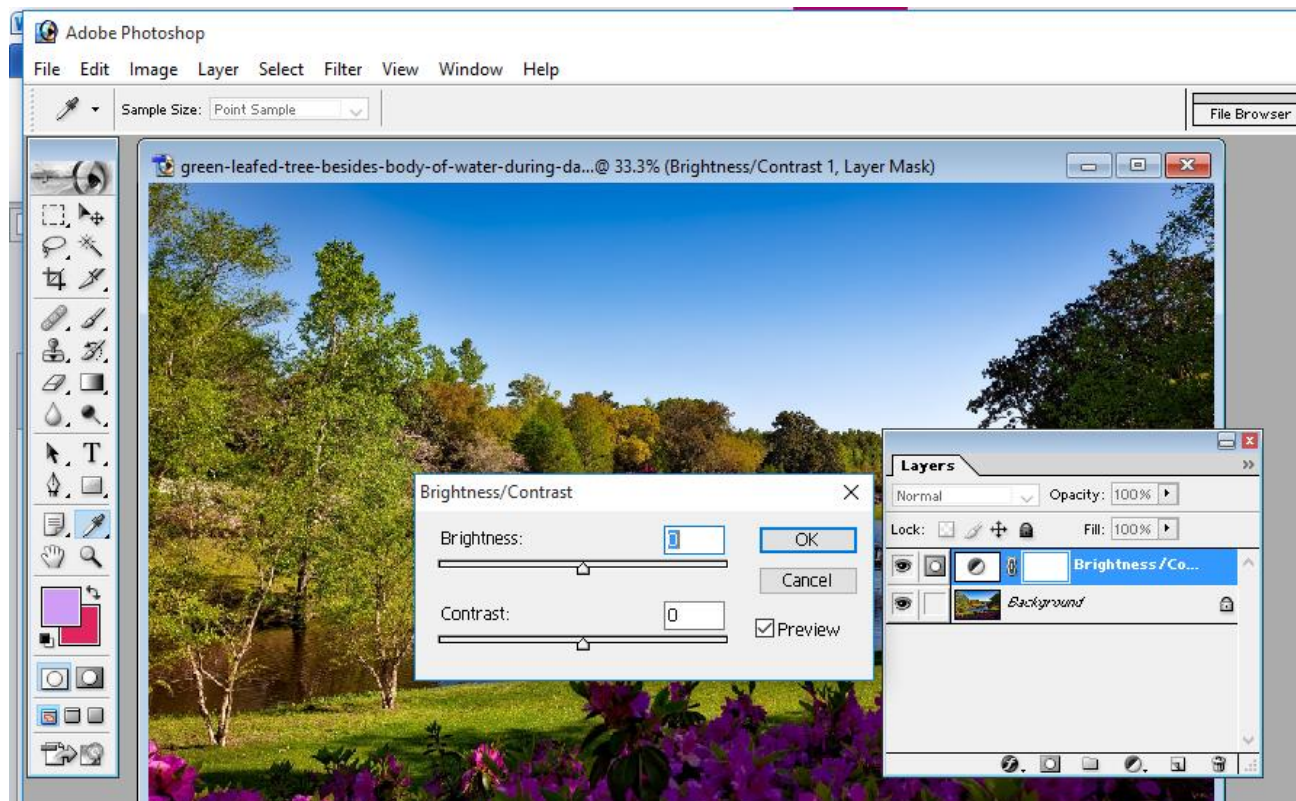
1. From the main menu, Choose Layer > New Adjustment Layer > Brightness/Contrast.



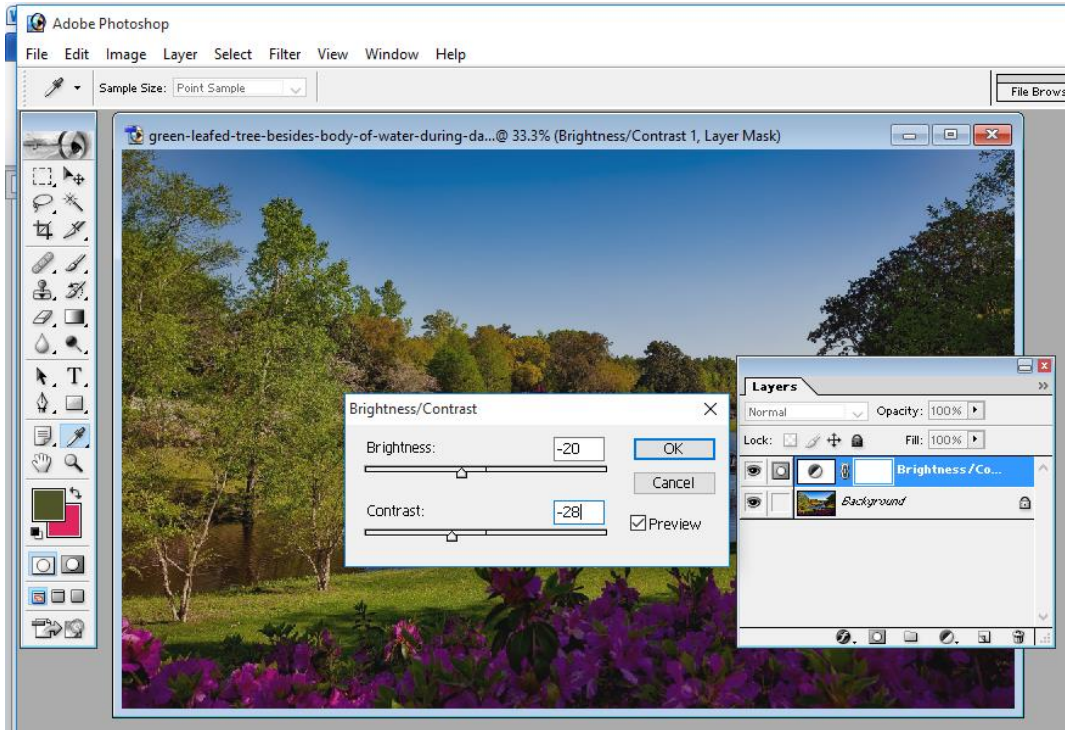
2. Click OK in the New Layer dialog box.



3. You can see that a new Brightness/ Contrast layer has been created and added in the Layers panel. And Brightness/ Contrast properties panel window is also displayed.



4. Now drag the sliders to adjust the brightness and contrast.



Now all the settings is similar as done earlier in direct method i.e. Dragging to the left decreases the level, and dragging to the right increases it. The number at the right of each slider reflects the brightness or contrast value.

Assignments

1. How the Contract and Brightness is adjusted?
2. How we can add a Brightness/Contrast Adjustment Layer? What are the advantages of adding an Adjustment layer?