# Process & Production

Demonstration & Discussion

Adobe Photoshop

Basics

PSD File Format
Image Formats
Photoshop Layers
Marquee, Lasso, Magic Wand
Image Menu
    Image Size, Canvas Size,
    Desaturate, Invert, Gradient Map
Halftone Patterns

PSD File Format

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# PSD File Format

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# PSD File Format

Adobe Photoshop files are about four times larger than a JPEG file, because Photoshop files do not compress image information (Photoshop files are “lossless” and JPEG files are “lossy”).

# PSD File Format

# PSD File Format

We should use Adobe Photoshop files to make specific changes to raster imagery information.

# Raster vs. Vector

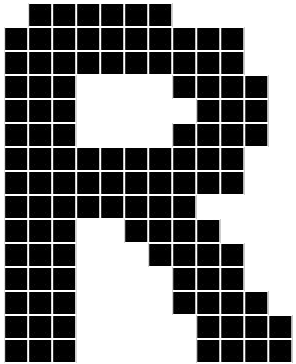
# Raster vs. Vector

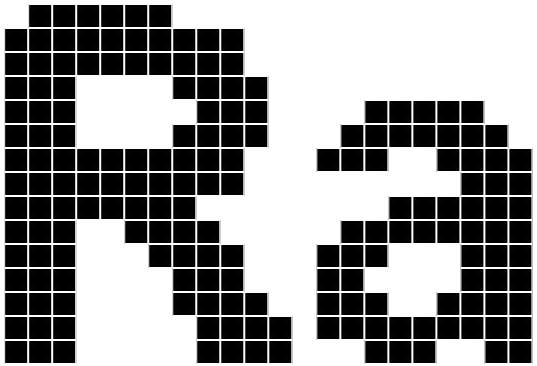
**All digital design software render visual information in one of two ways…**

# Raster vs. Vector

**All digital design software render visual information in one of two ways…**

**…as either…**

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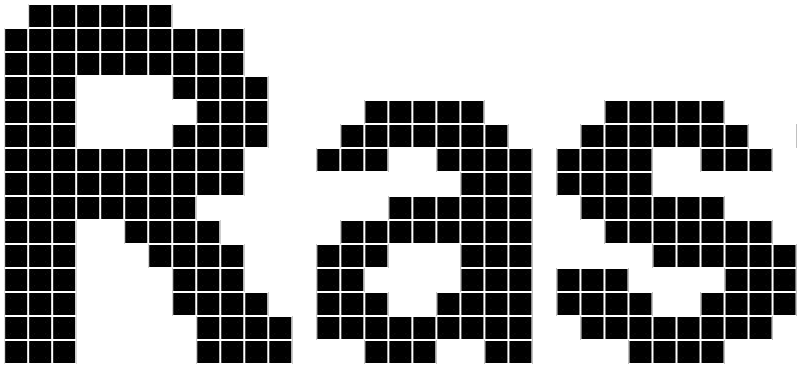
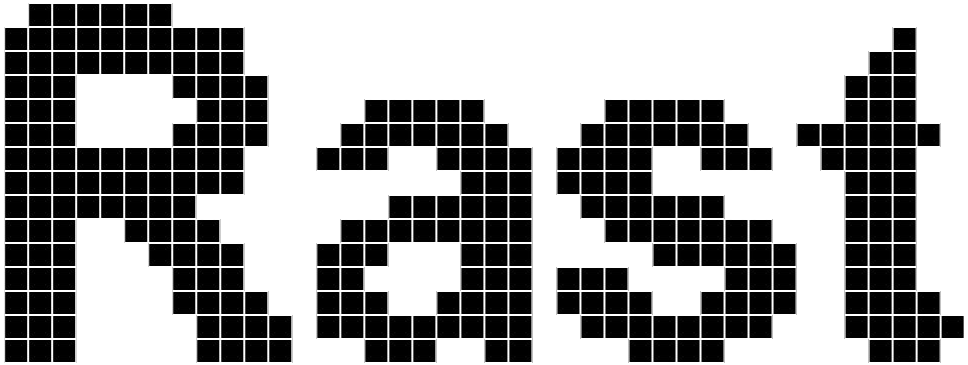
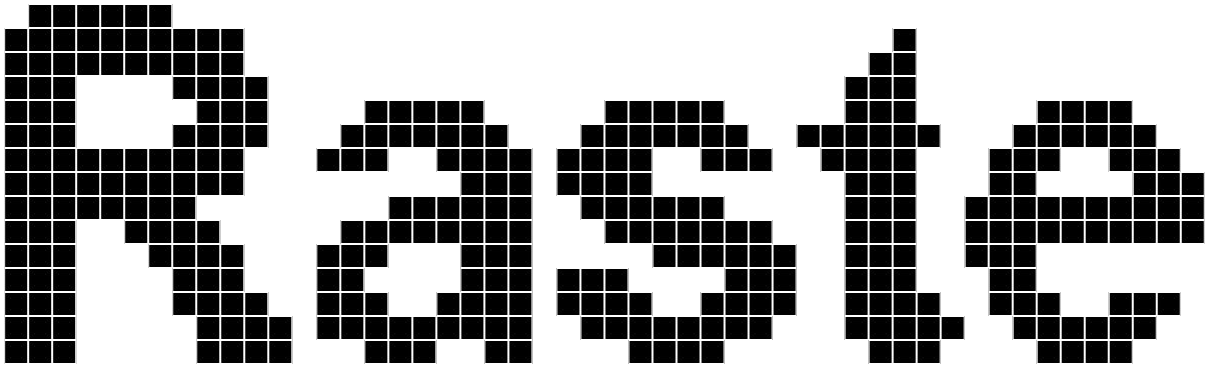
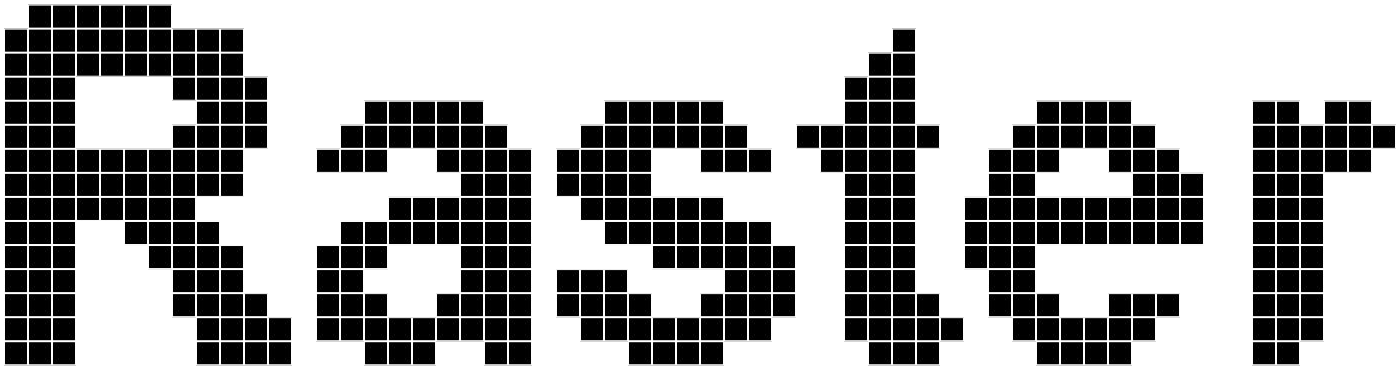
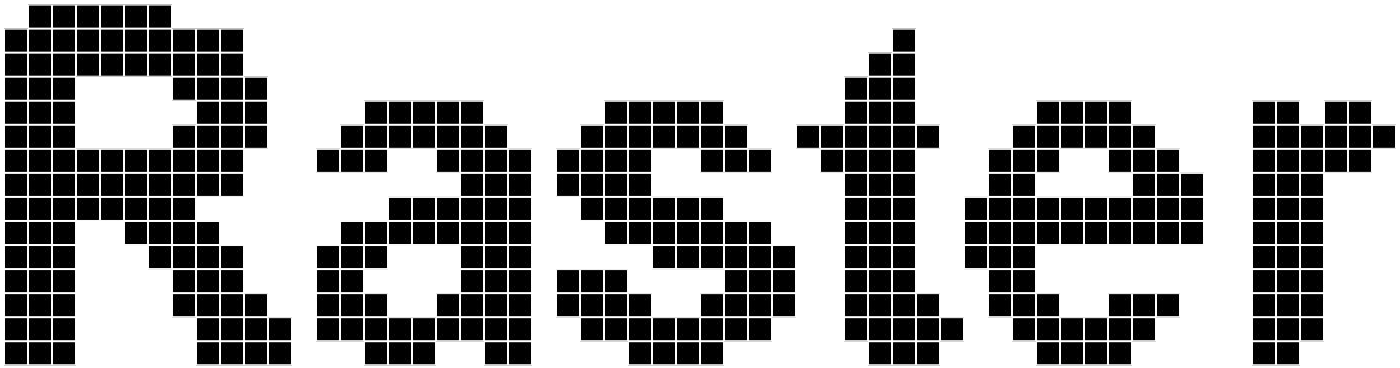

Ras

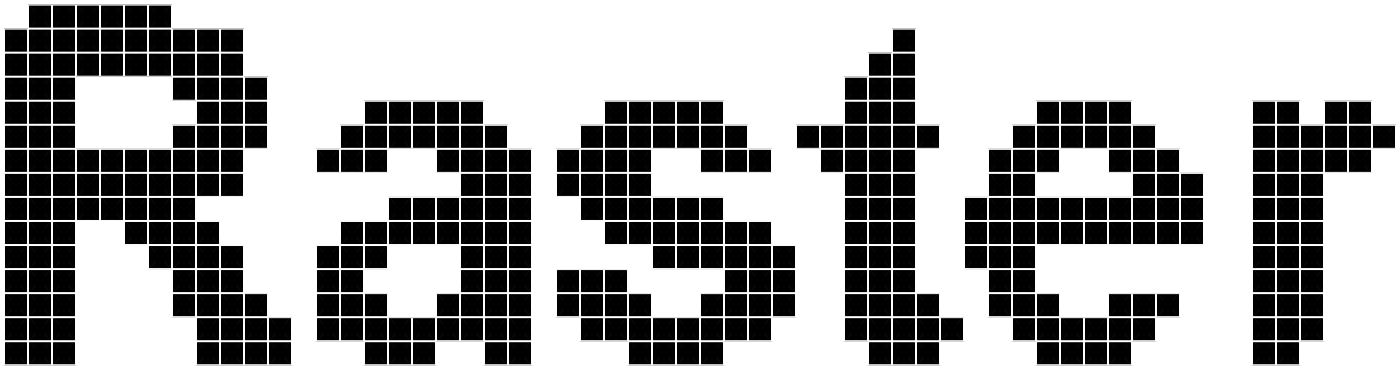

Rast


Raste

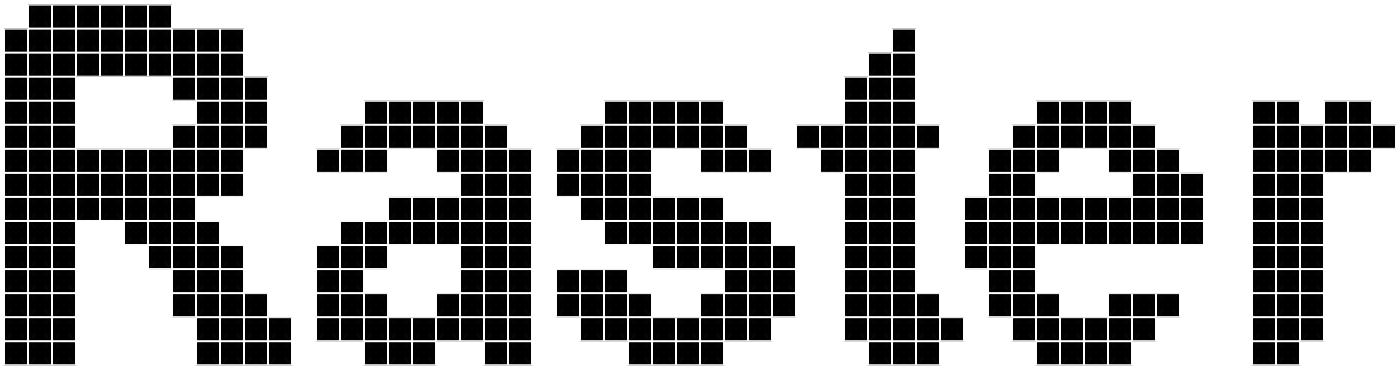

Raster




- **Also called “bitmap”**




- Also called “bitmap”
- Image information rendered in pixels (the squares)

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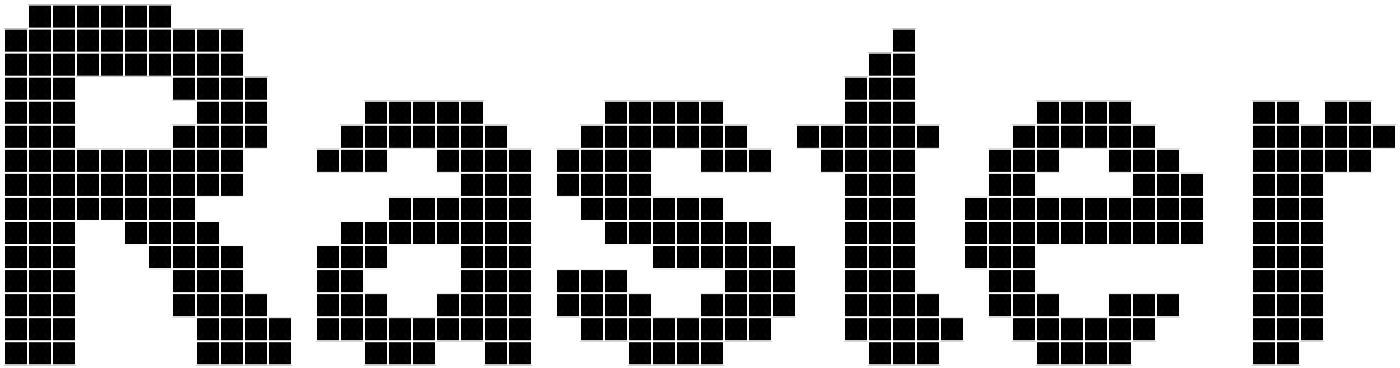
- PSD, JPEG, PNG, GIF, etc.




- Also called “bitmap”
- Image information rendered in pixels (the squares)
- PSD, JPEG, PNG, GIF, etc.
- Ideal for photographs

# Raster vs. Vector

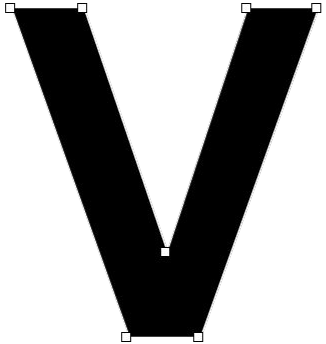
**All digital design software render visual information in one of two ways…**

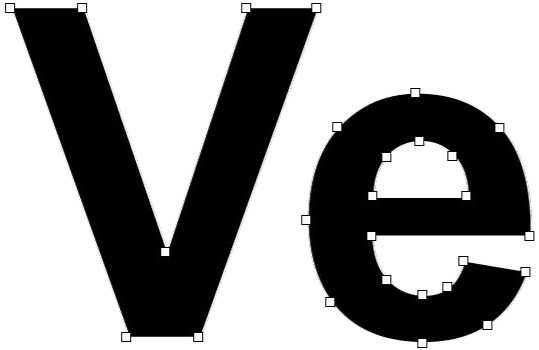
**…either raster…**

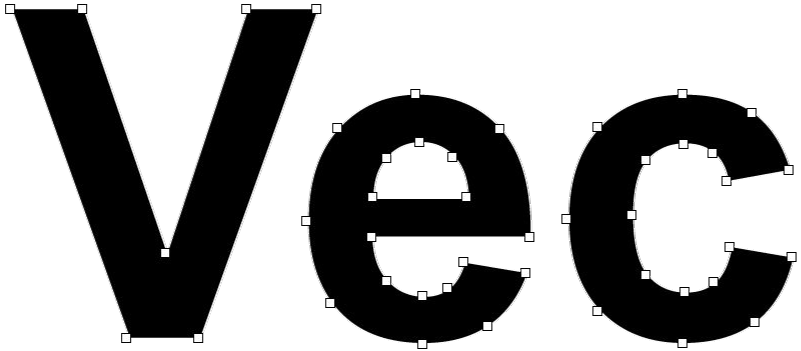
# Raster vs. Vector

**All digital design software render visual information in one of two ways…**

**…either raster… or…**



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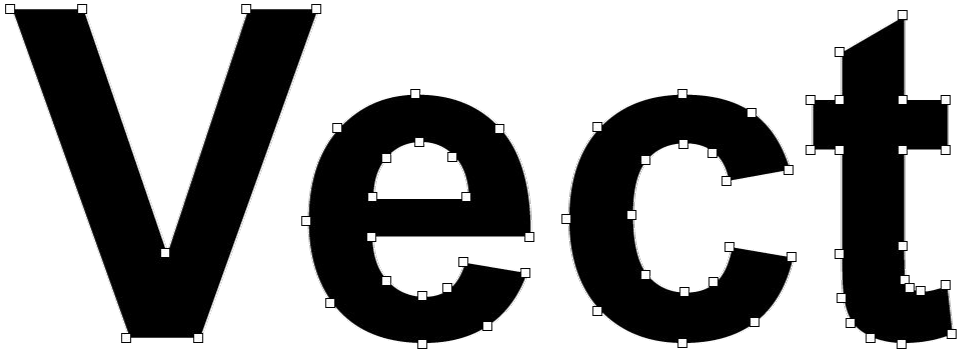
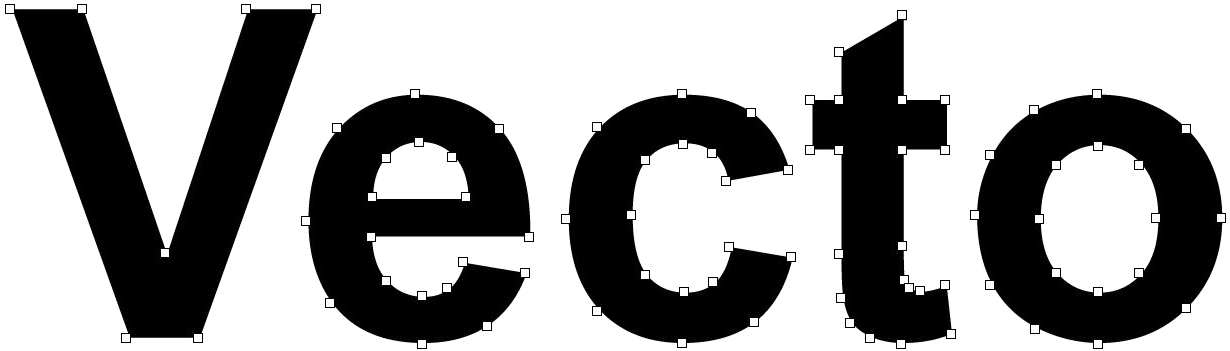
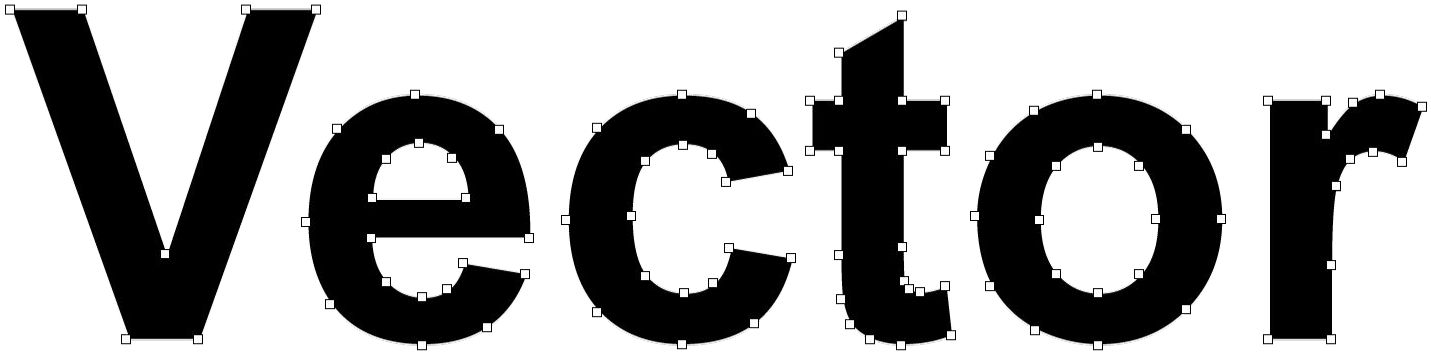
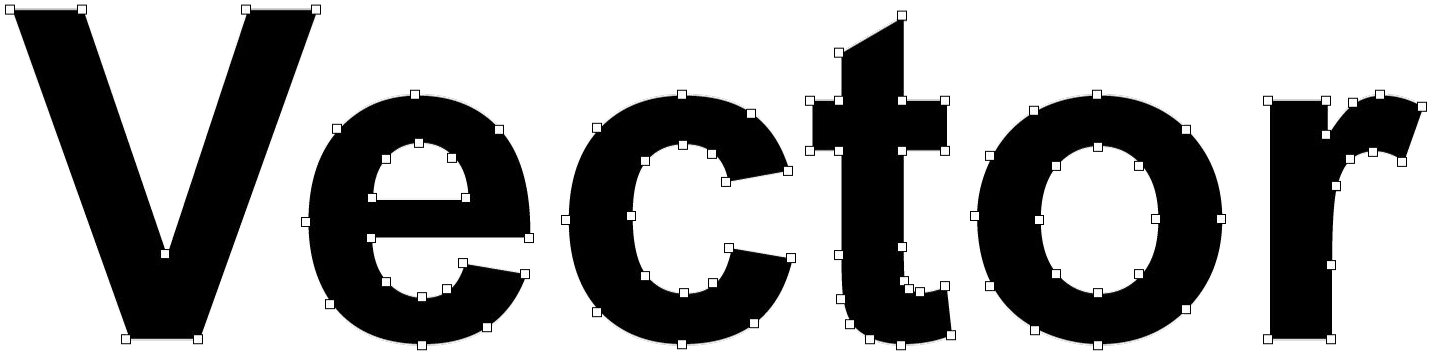
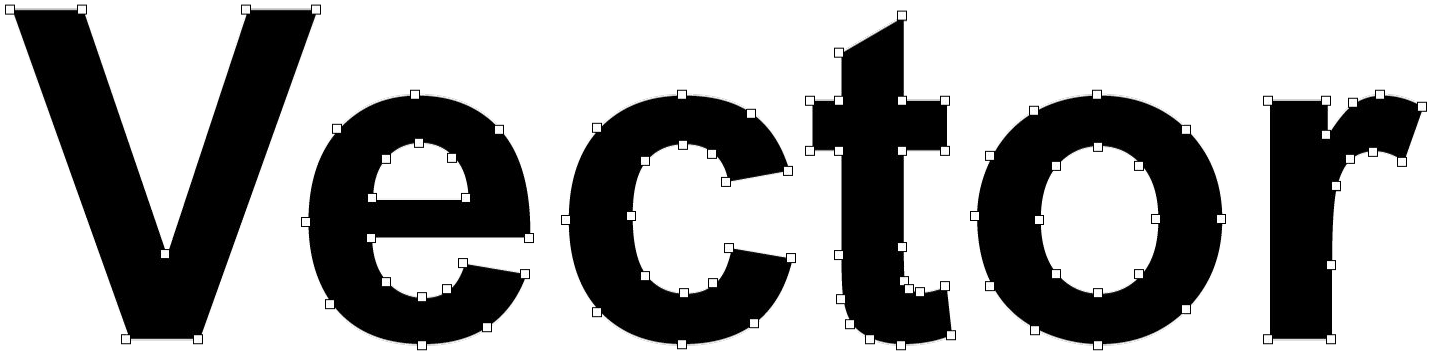

Vect


Vecto

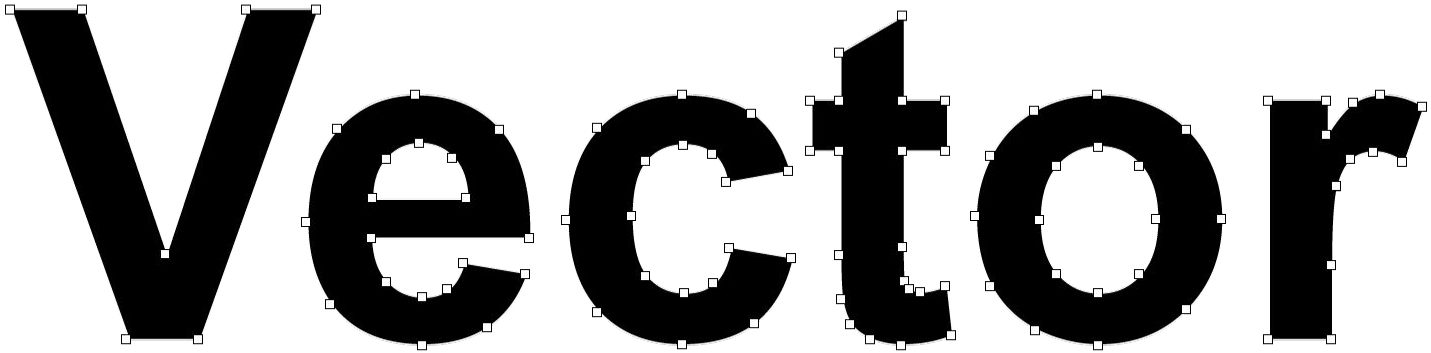

Vector



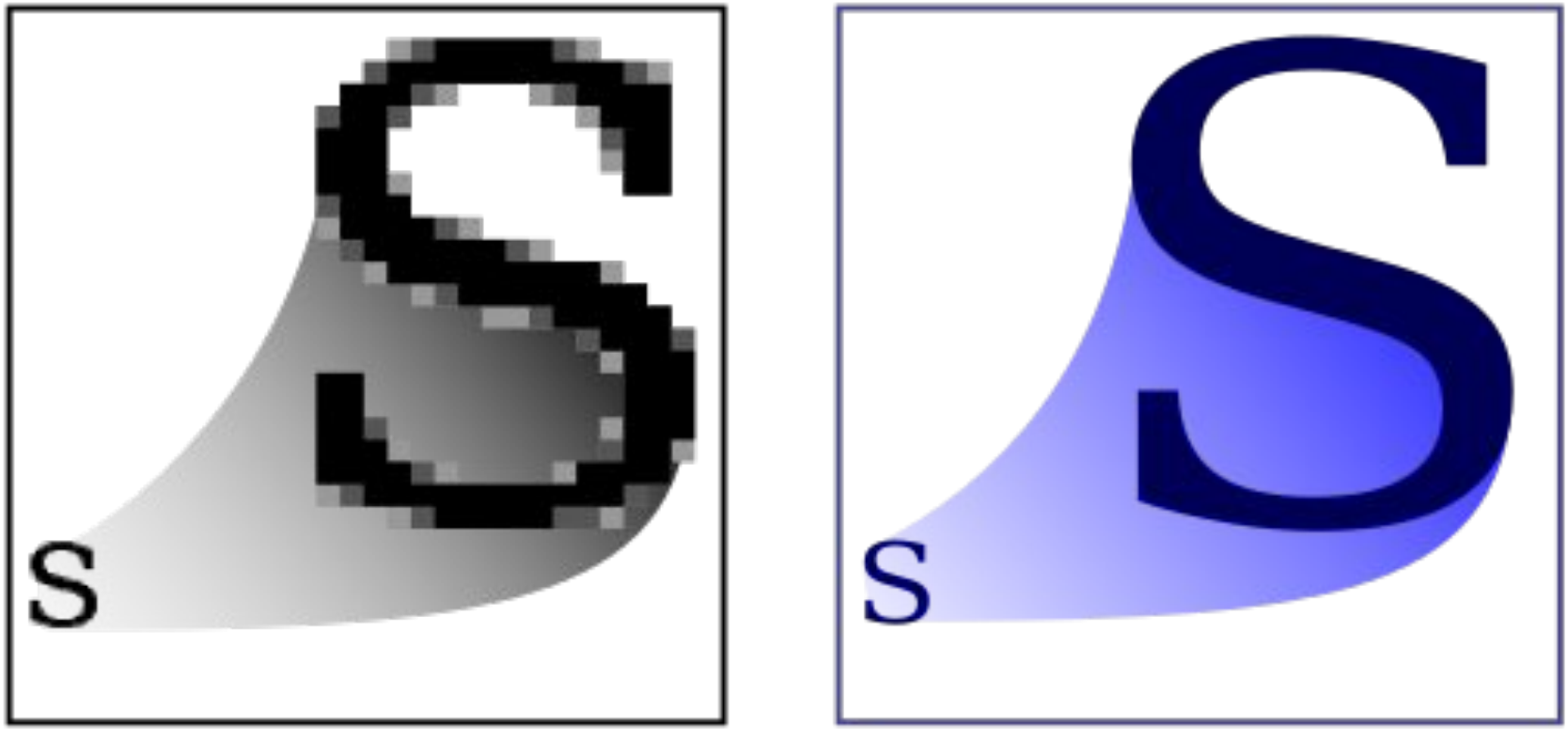

- **PDF, EPS, SVG, AI**



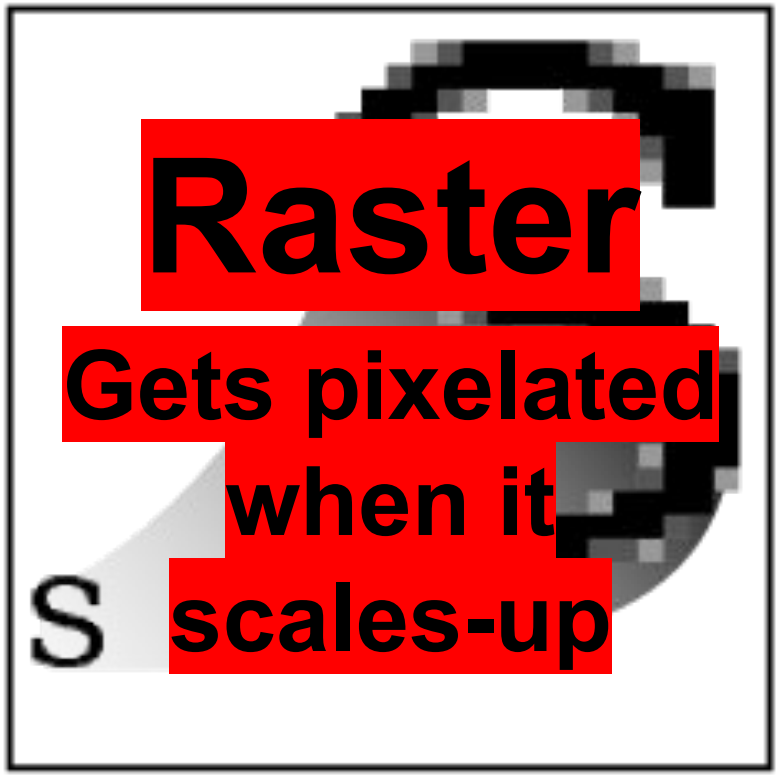

- PDF, EPS, SVG, AI
- Images rendered by connecting coordinates

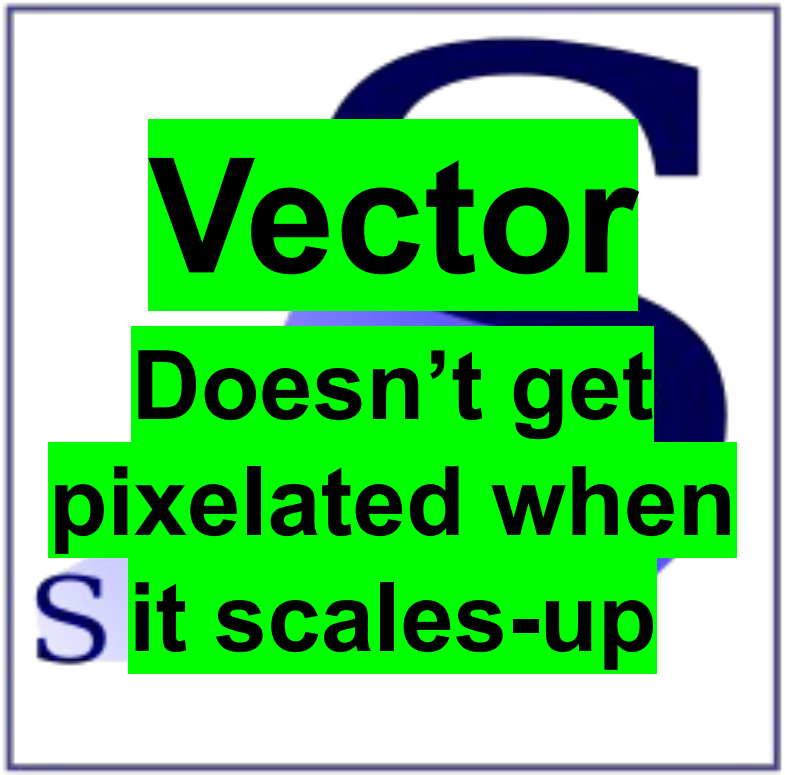



- PDF, EPS, SVG, AI
- Images rendered by connecting coordinates
- Good for logos, illustrations, typography




<https://commons.wikimedia.org/wiki/File:Bitmap_VS_SVG.svg>




<https://commons.wikimedia.org/wiki/File:Bitmap_VS_SVG.svg>

# PSD File Format

# PSD File Format

We should use Adobe Photoshop files to make specific changes to raster imagery information.

But we should ***never*** place a Photoshop file into an InDesign document as an image link (unless you want to crash your computer).

PSD File Format

Image Formats

Photoshop Layers

Marquee, Lasso, Magic Wand

Image Menu

- Image Size, Canvas Size,
- Desaturate, Invert, Gradient Map

Halftone Patterns

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# Image Formats

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- **JPEG**
  **(Joint Photographic Experts Group)**

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- **EPS**
  **(Encapsulated Postscript)**

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  **(Portable Networks Graphics)**
- **EPS**
  **(Encapsulated Postscript)**
- **TIFF**
  **(Tagged Image File Format)**

# Image Formats

- **JPEG**
  **(Joint Photographic Experts Group)**

# Image Formats

- **JPEG**
  **(Joint Photographic Experts Group)**
  - 1992
  - Lossy
  - Photographs (i.e. real world imagery)
  - Complex coloring

# Image Formats

- **GIF**
  **(Graphics Interchange Format)**

# Image Formats

- **GIF**
  **(Graphics Interchange Format)**
  - 1987
  - Lossy, dithering
  - Computer graphics, simple icons
  - Simple colors
  - Animations

<http://users.wfu.edu/matthews/>

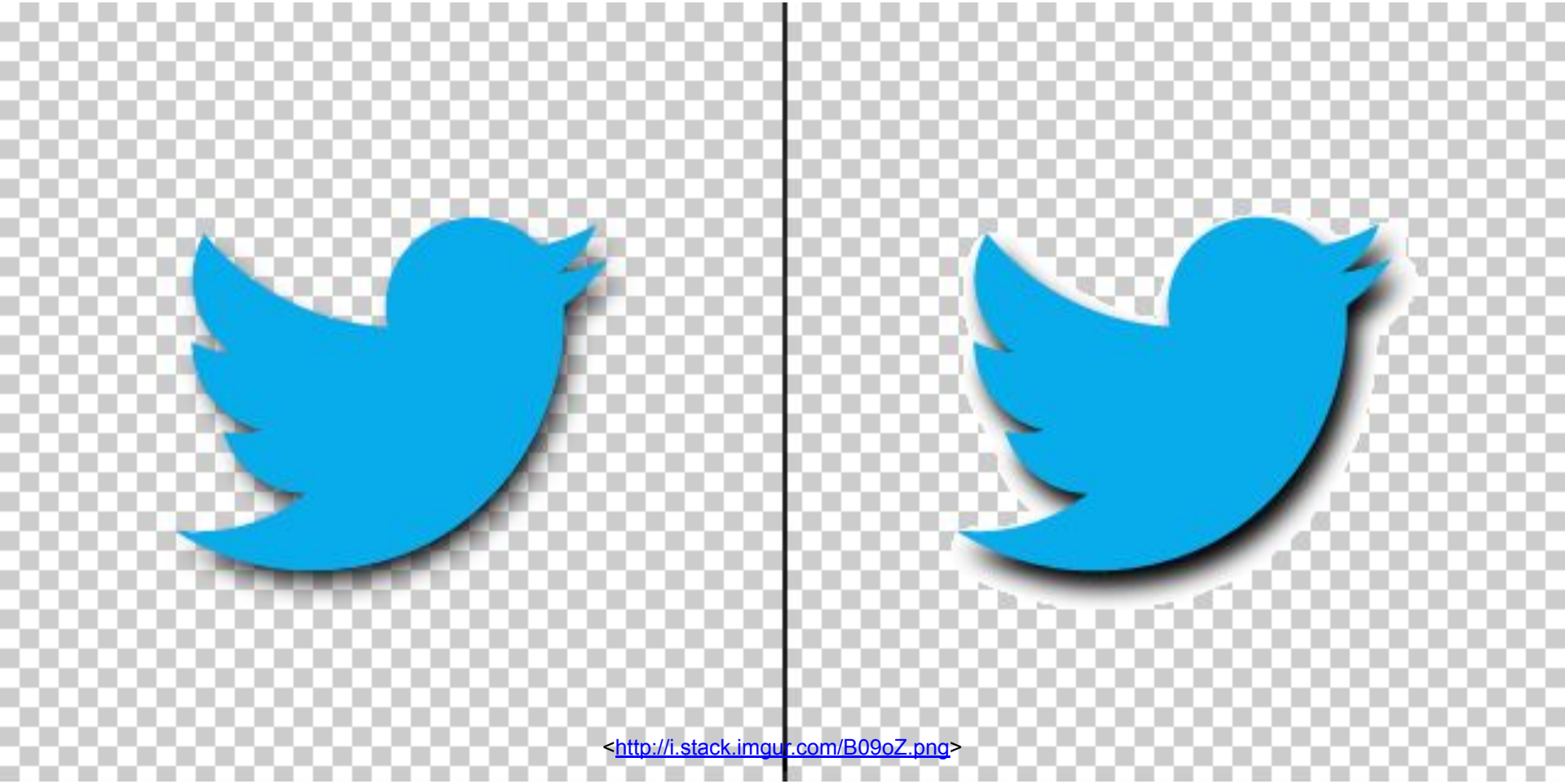
JPEG
Good for real-world imagery (photographs)
GIF
Bad for photos, better for digital imagery (logos, animations)
<http://users.wfu.edu/matthews/>

# Image Formats

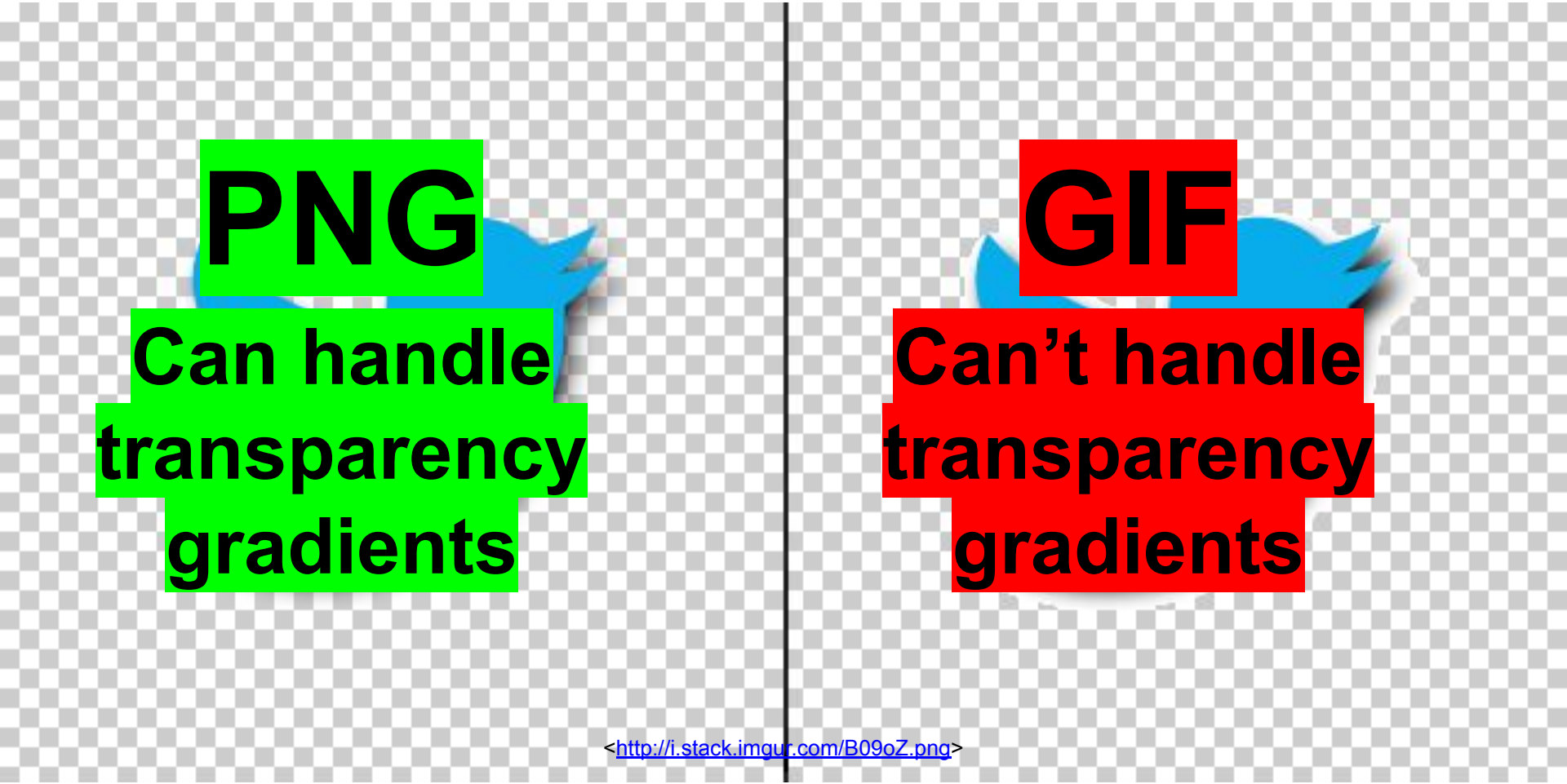
- **PNG**
  **(Portable Networks Graphics)**

# Image Formats

- **PNG**
  **(Portable Networks Graphics)**
  - 1996
  - Lossless
  - Computer graphics, alphas/transparencies, shading
  - Simple colors/transitions = smaller file sizes



<http://i.stack.imgur.com/B09oZ.png>




<http://i.stack.imgur.com/B09oZ.png>

# Image Formats

- **EPS**
  **(Encapsulated Postscript)**
  - Lossless
  - Vector format
  - Like a PDF file, but for images
  - Industry standard for most printing applications

# Image Formats

- **TIFF**
  **(Tagged Image File Format)**
  - **Lossless**
  - **Raster format**
  - **Industry standard for most printing applications**

PSD File Format

**Image Formats**

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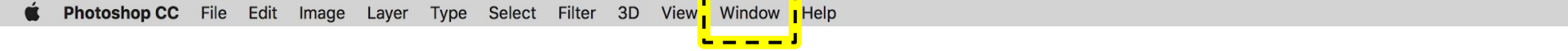
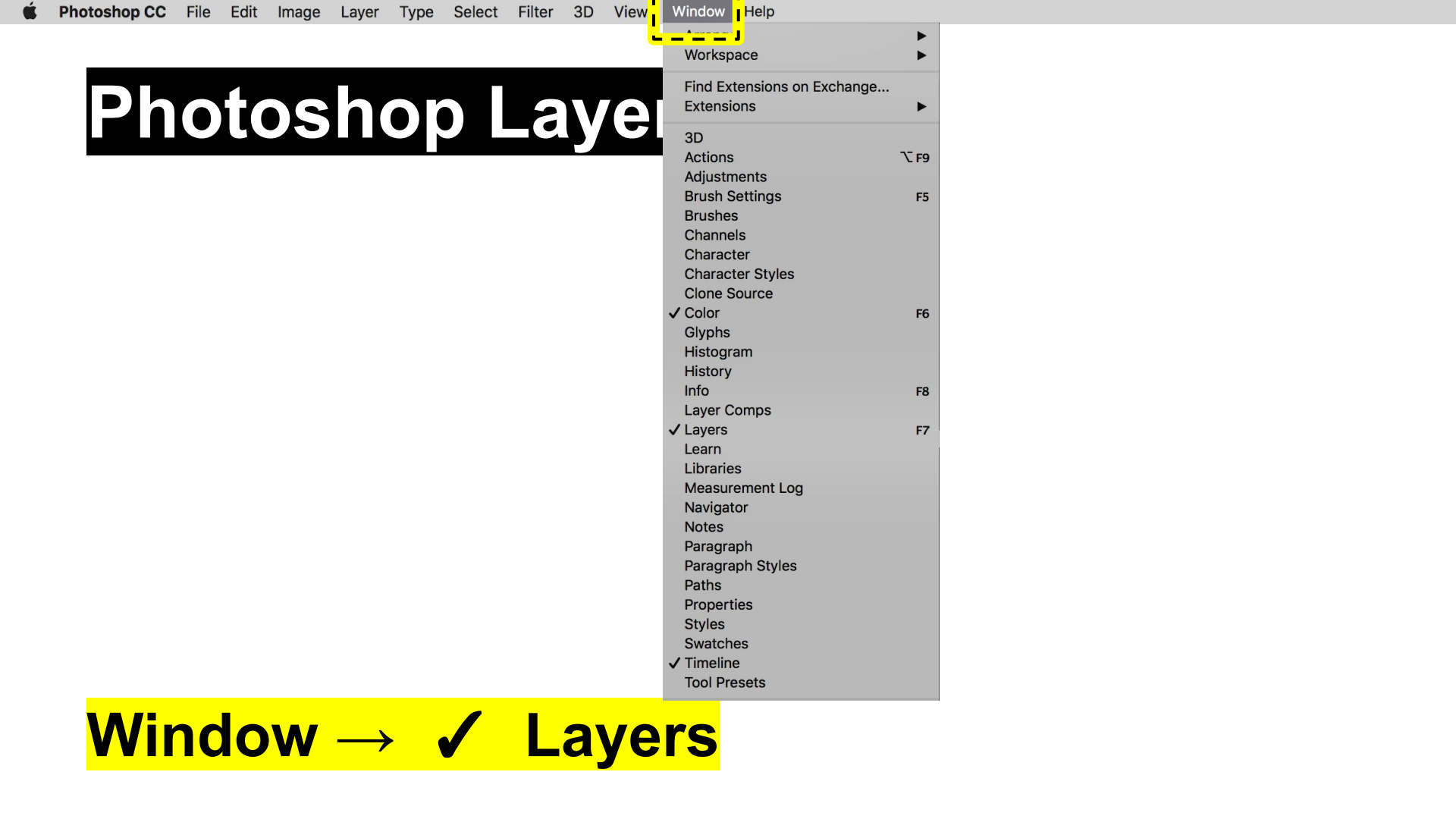
# Photoshop Layers

# Photoshop Layers

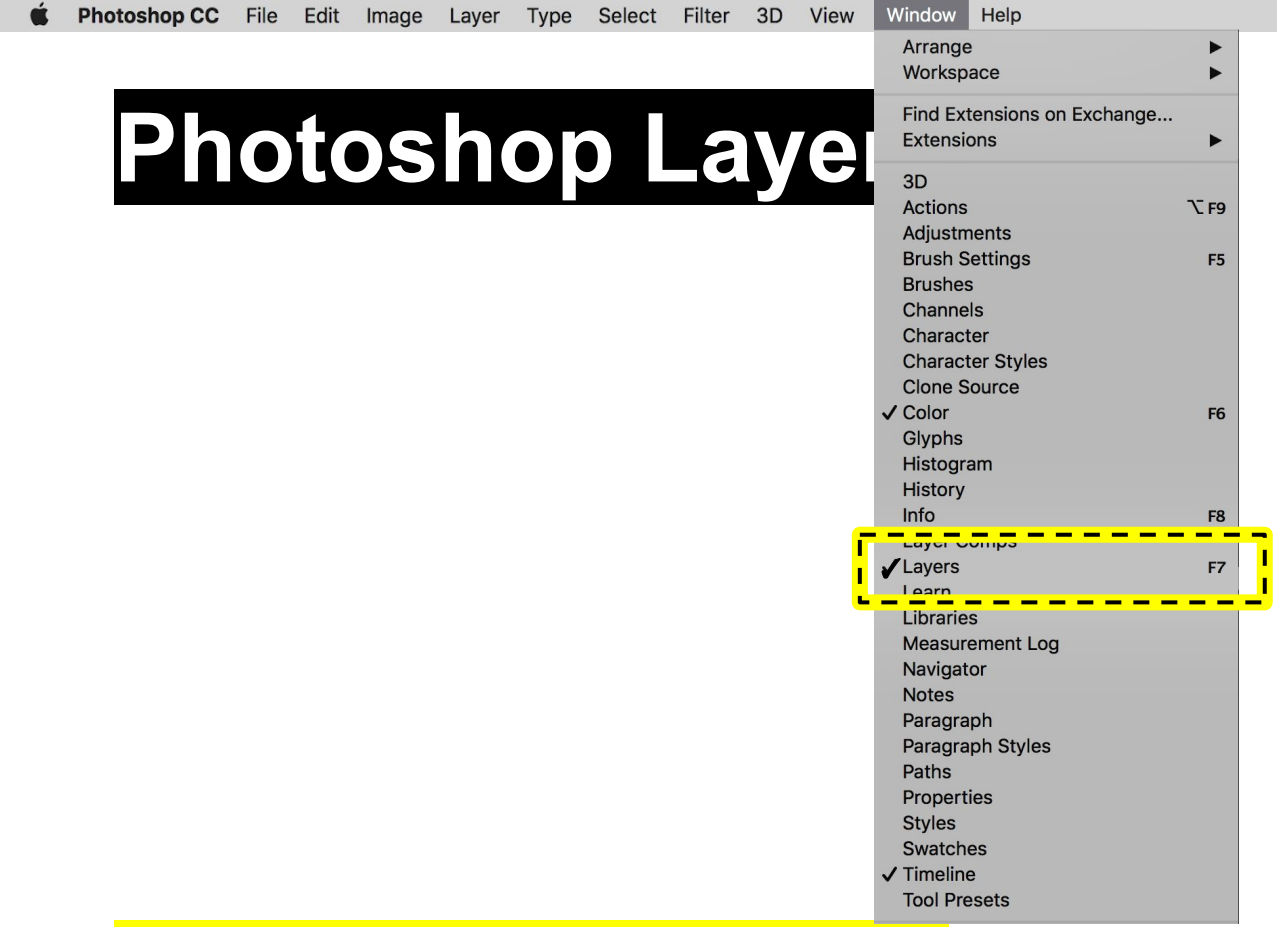



# Photoshop Layers

**Window → ✓ Layers**

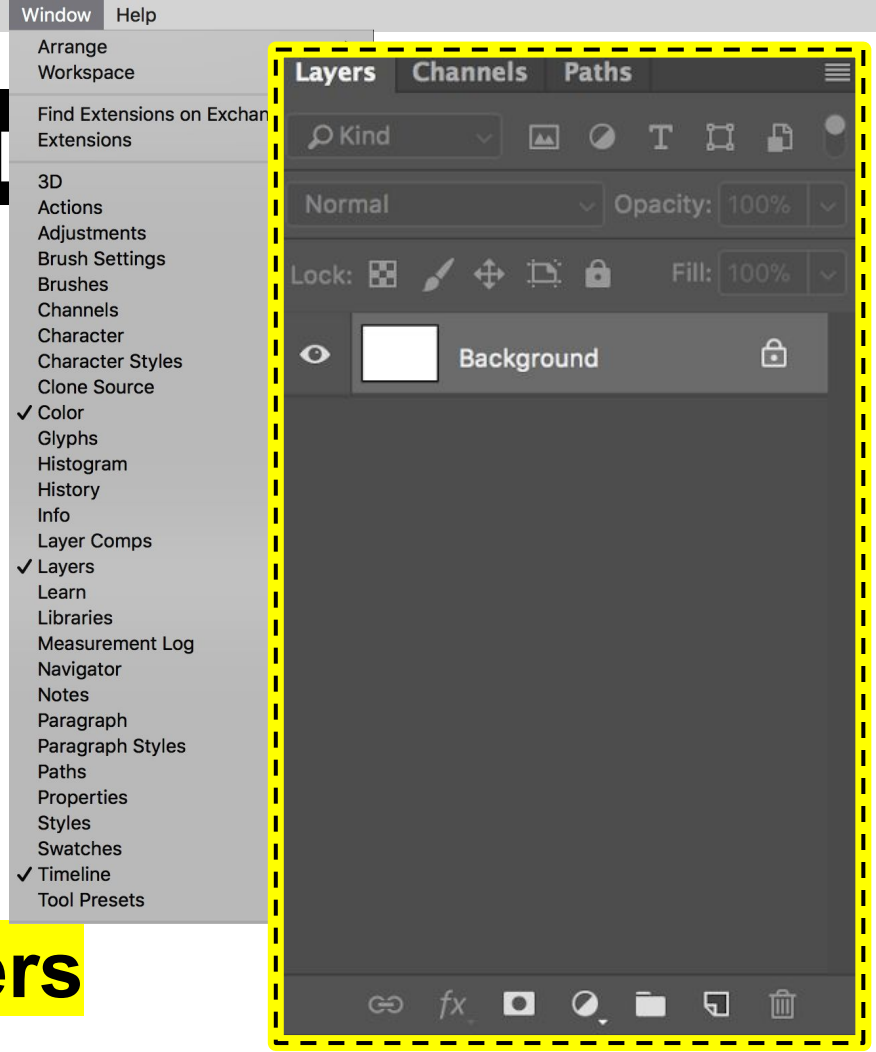

Photoshop CC File Edit Image Layer Type Select Filter 3D View Window Help
Photoshop Layer
Workspace
Find Extensions on Exchange...
Extensions
3D
Actions ⌥F9
Adjustments
Brush Settings F5
Brushes
Channels
Character
Character Styles
Clone Source
✓ Color F6
Glyphs
Histogram
History
Info F8
Layer Comps
✓ Layers F7
Learn
Libraries
Measurement Log
Navigator
Notes
Paragraph
Paragraph Styles
Paths
Properties
Styles
Swatches
✓ Timeline
Tool Presets
Window → ✓ Layers

# Photoshop Layer



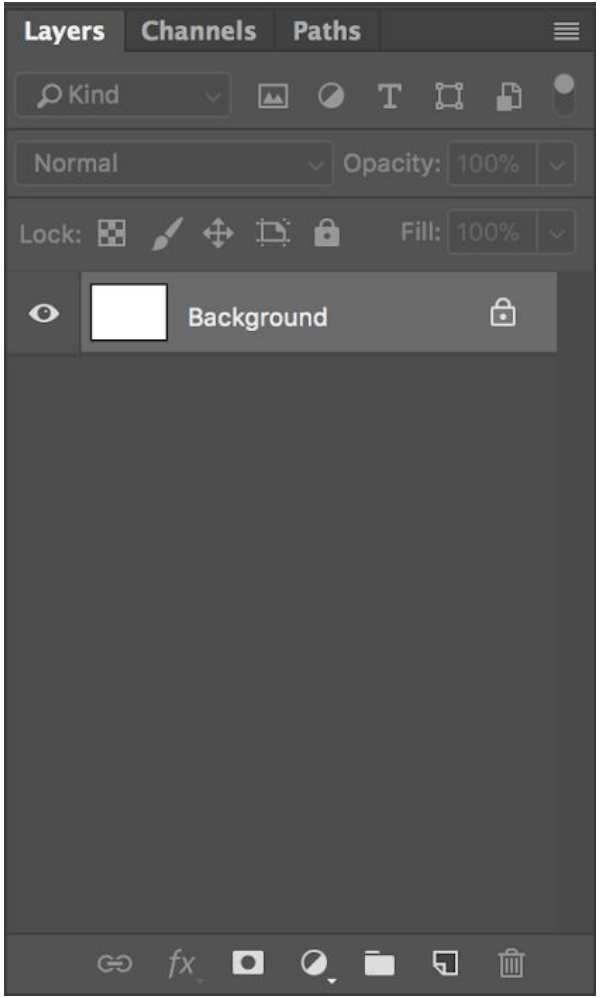

**Window → ✓ Layers**

# Photoshop Layer



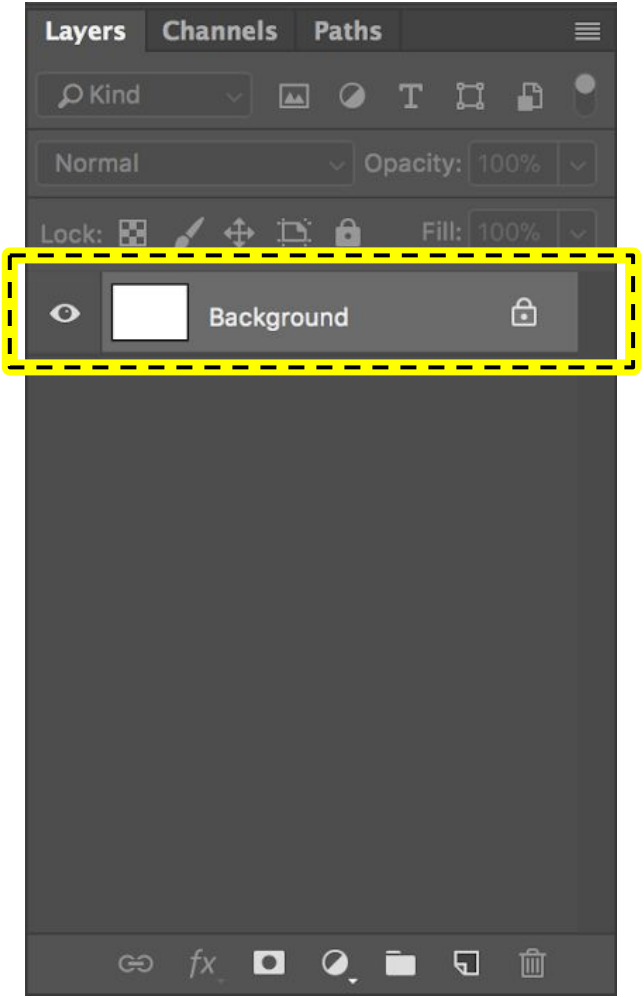

**Window → ✓ Layers**

# Photoshop Layers



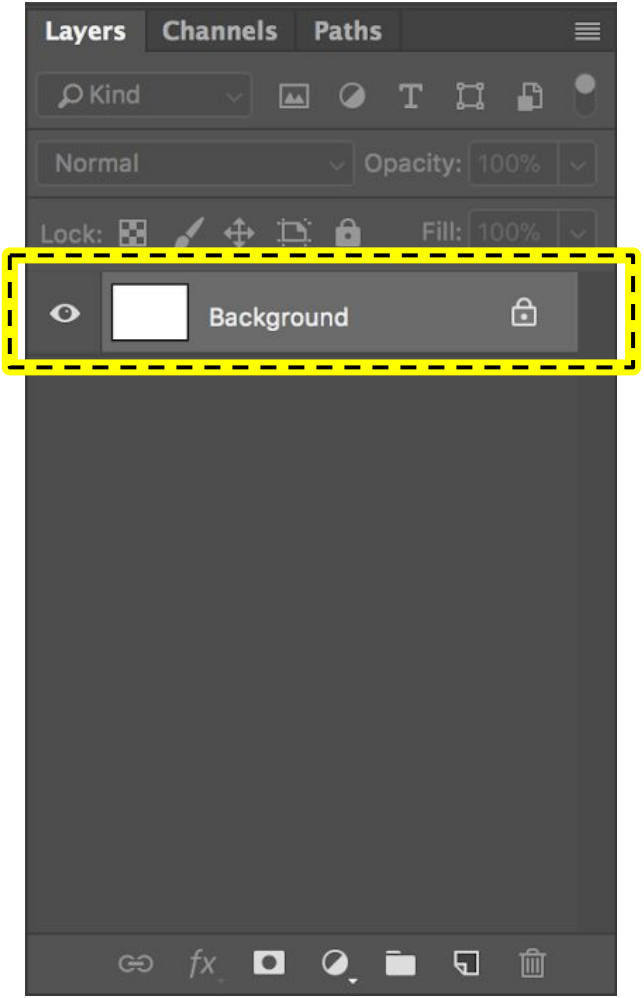
# Photoshop Layers

When we first create a document or open an image in Photoshop, the information is “flattened”…



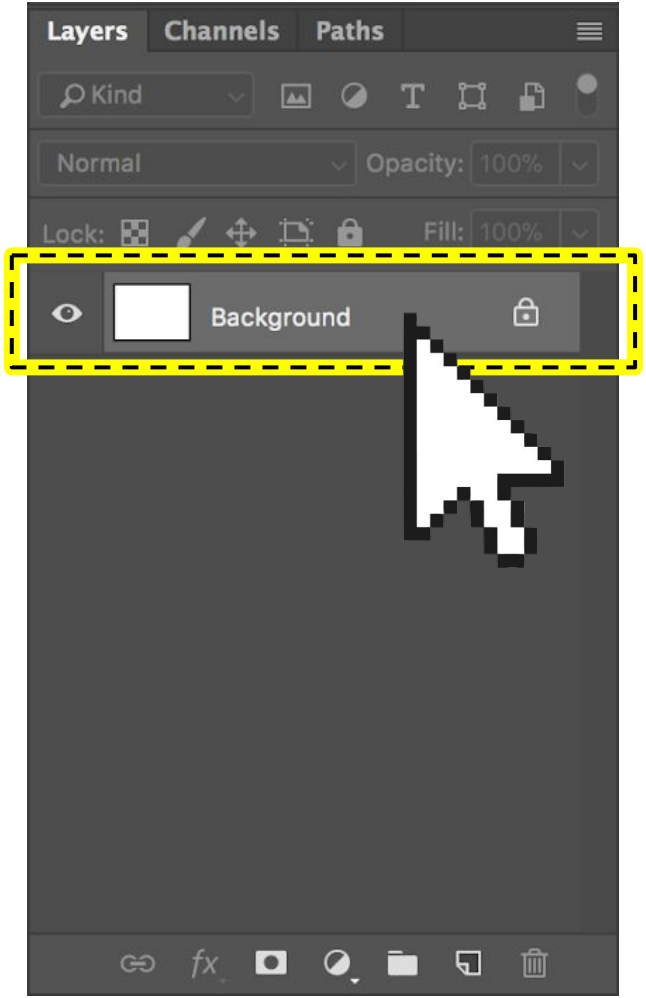
# Photoshop Layers

When we first create a document or open an image in Photoshop, the information is “flattened,” which means it does not have a transparency (or “alpha”).



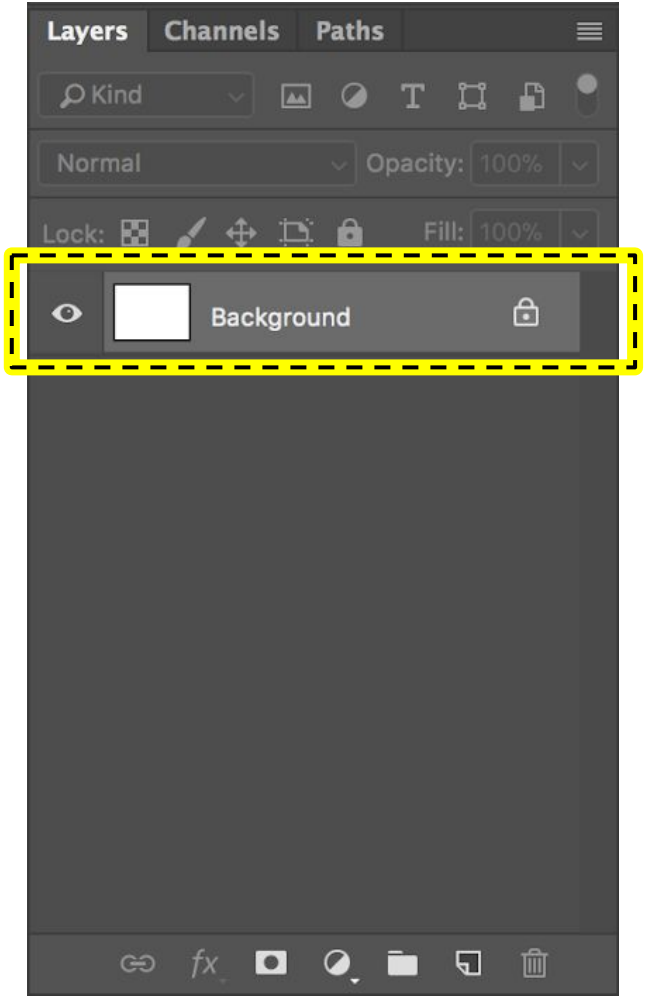
# Photoshop Layers

Double-click the row to convert the flattened Background to a layer…

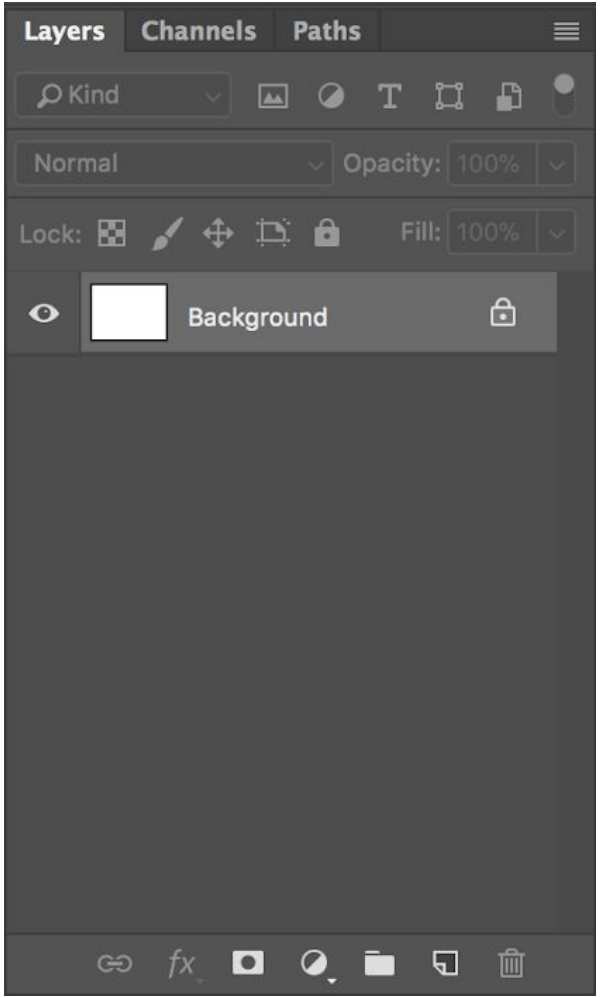


# Photoshop Layers

Double-click the row to convert the flattened Background to a layer… which will allow the use of transparencies

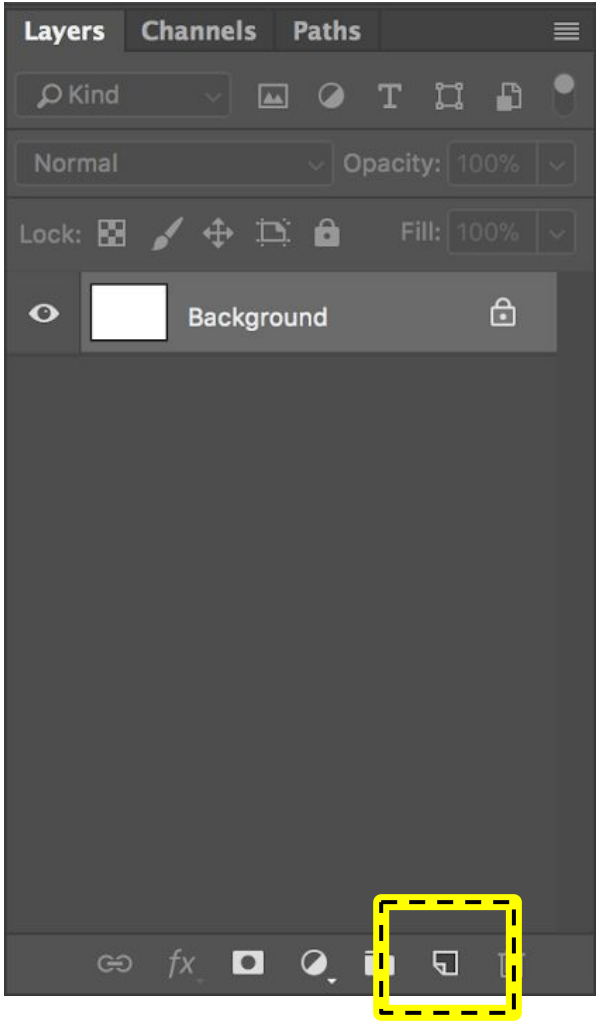


# Photoshop Layers



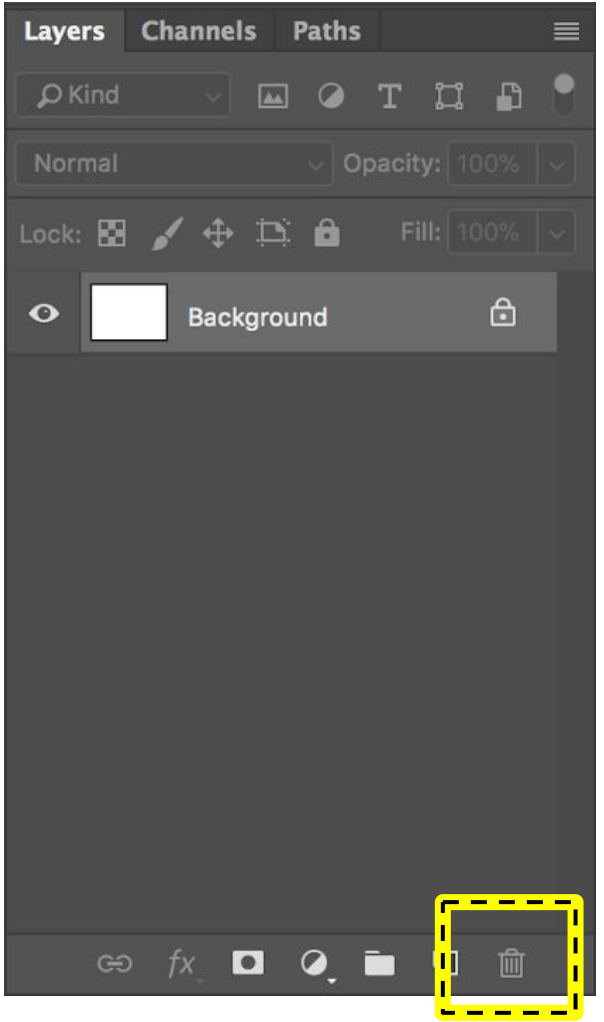
# Photoshop Layers

Create a new layer.



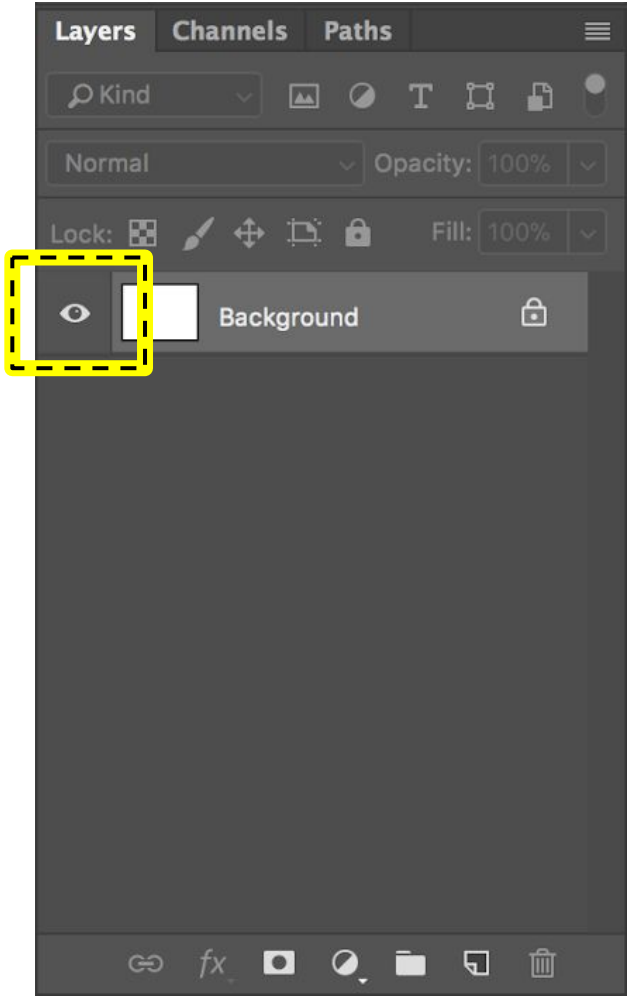
# Photoshop Layers

Delete selected layer.



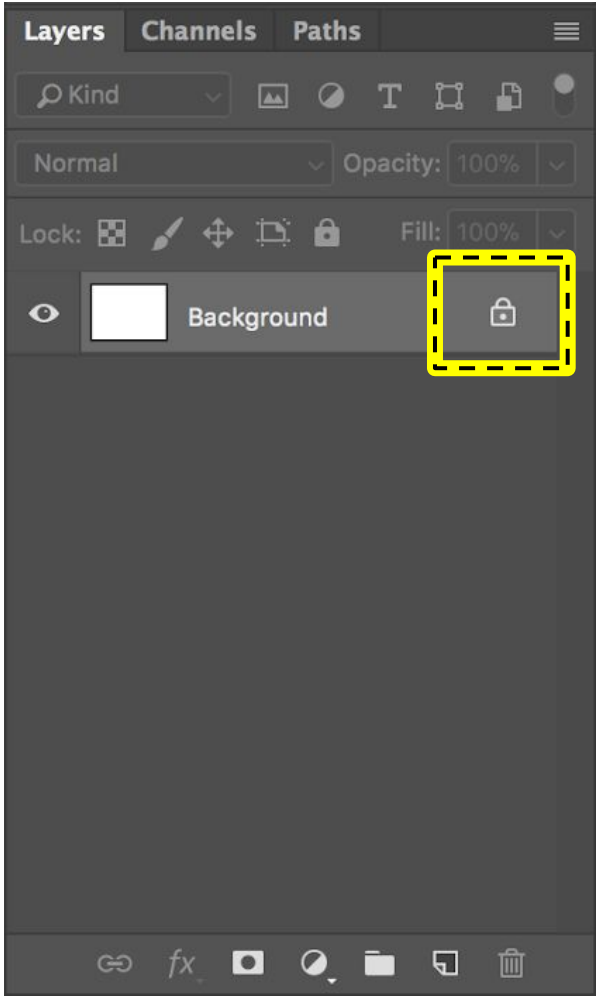
# Photoshop Layers

Turn layer visibility on/off.



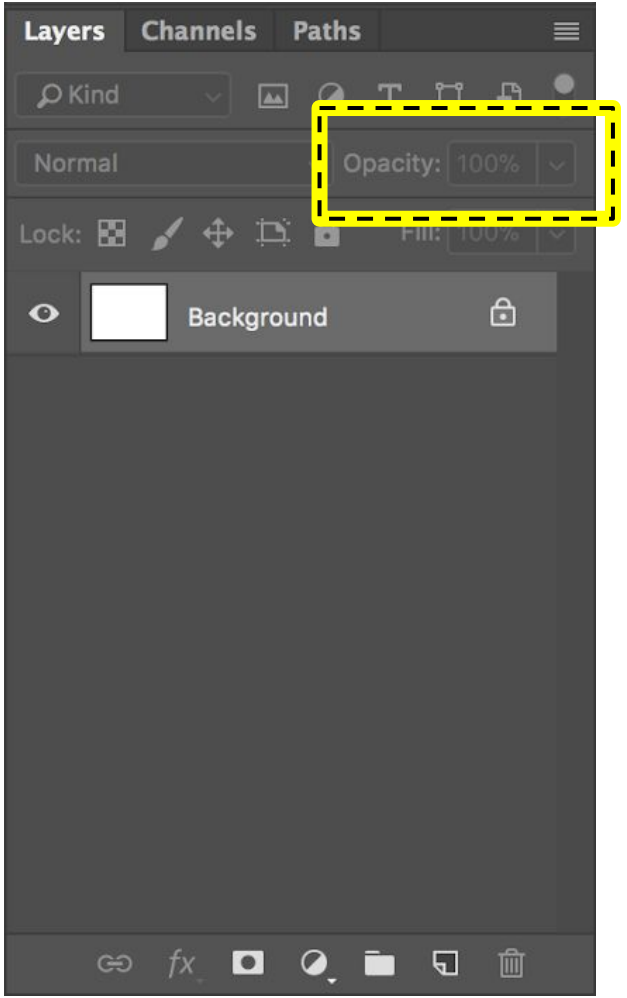
# Photoshop Layers

Lock/unlock layer.



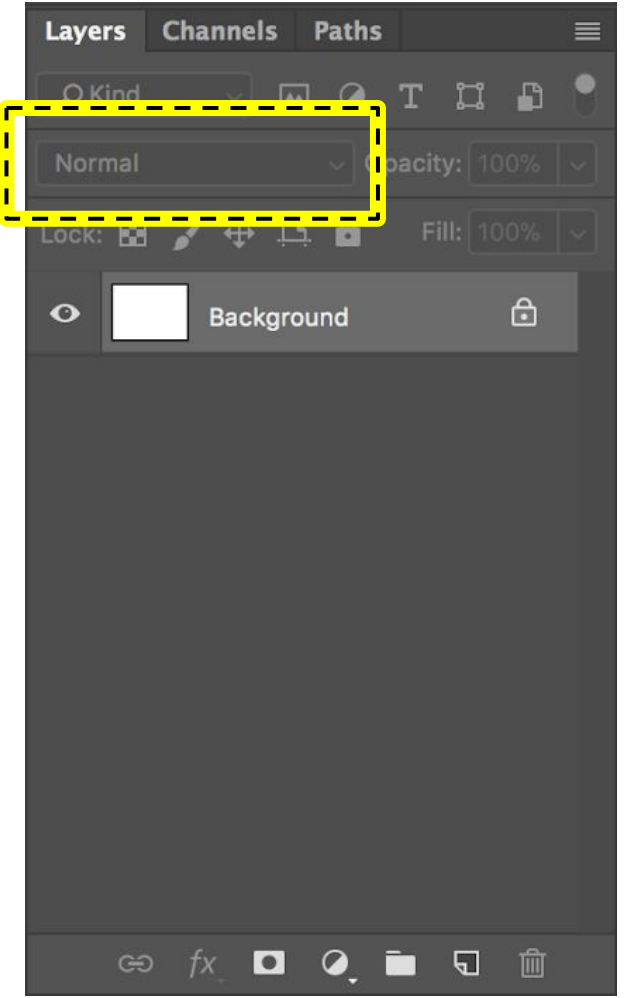
# Photoshop Layers

Control layer opacity.



# Photoshop Layers

Control layer opacity blend mode.



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# Marquee

# Marquee

# Marquee

# Marquee

The Rectangular Marquee Tool lets you select a simple rectangular area on the composition.

# Lasso

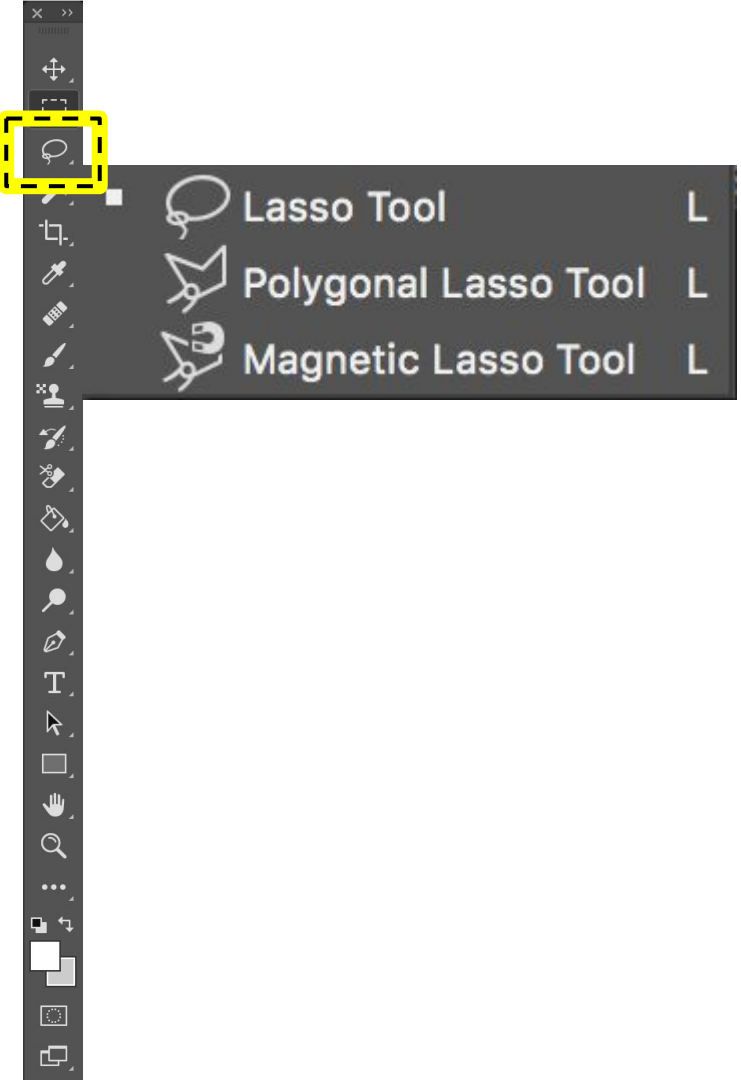
# Lasso

# Lasso

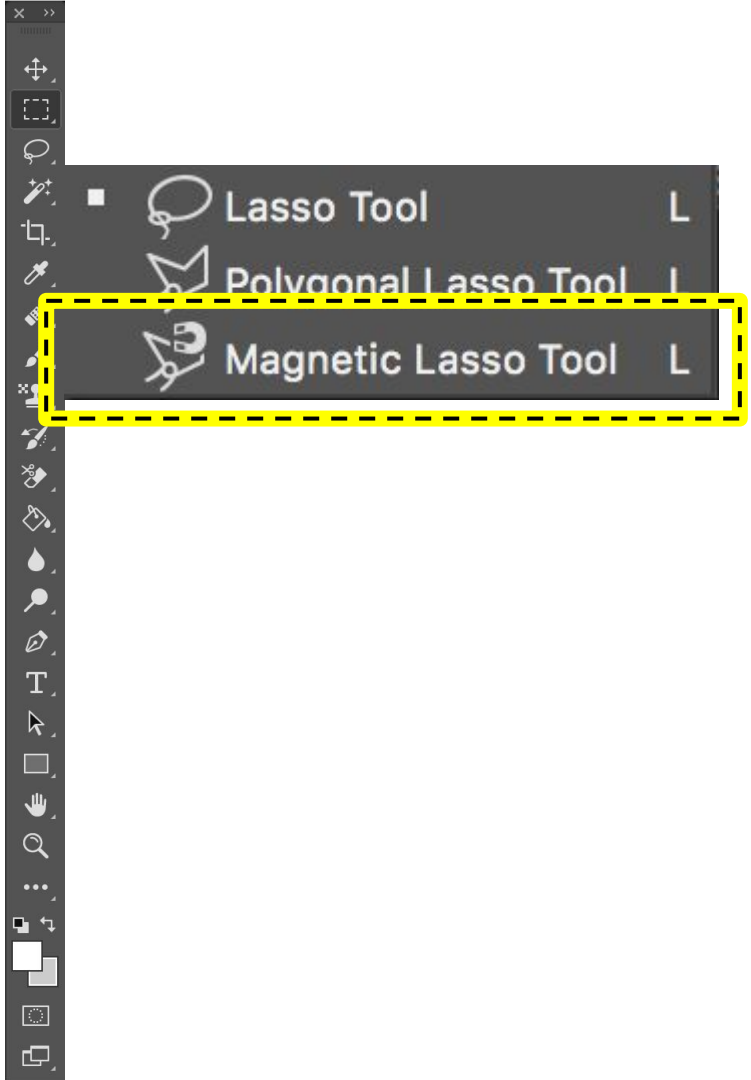
The Lasso Tool lets you draw and select a more complex area on the composition.

# Lasso

# Lasso

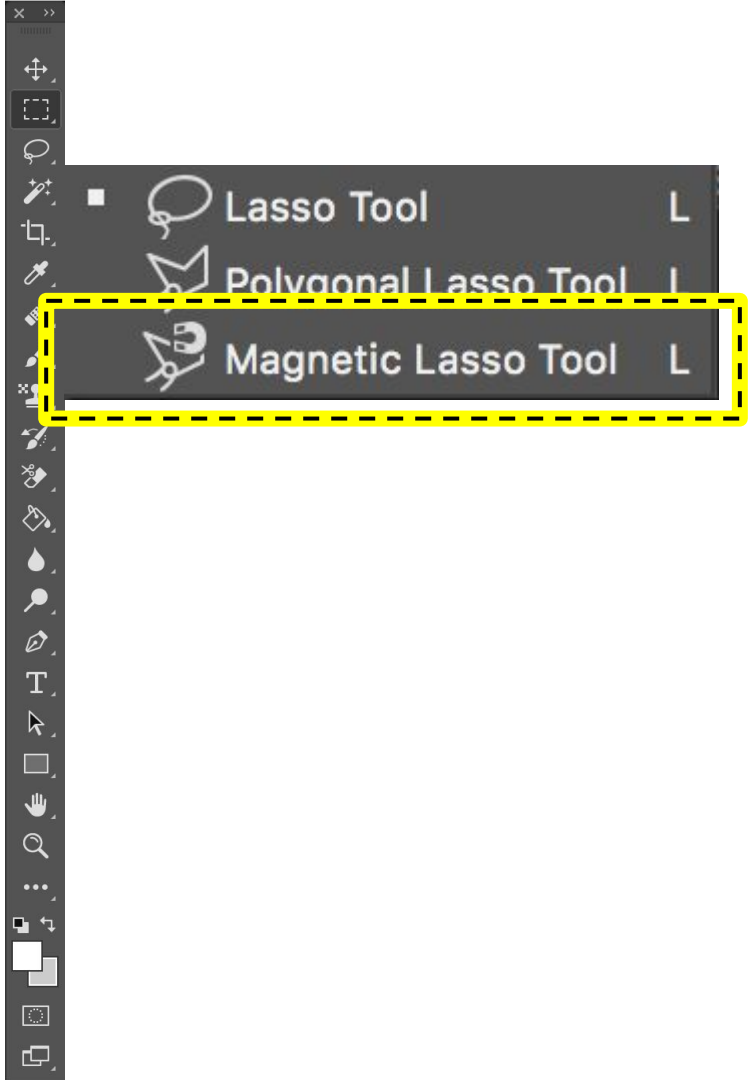


# Lasso



# Lasso

The Magnetic Lasso Tool uses image interpolation to help you more precisely outline/trace the edges of your selection.



# Magic Wand

# Magic Wand

# Magic Wand

The Magic Wand Tool uses magic to help you select a particular color value in the composition.

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**Marquee, Lasso, Magic Wand**
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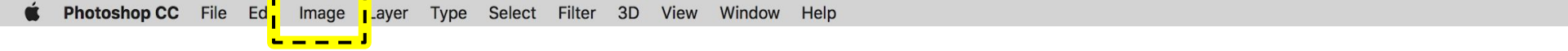
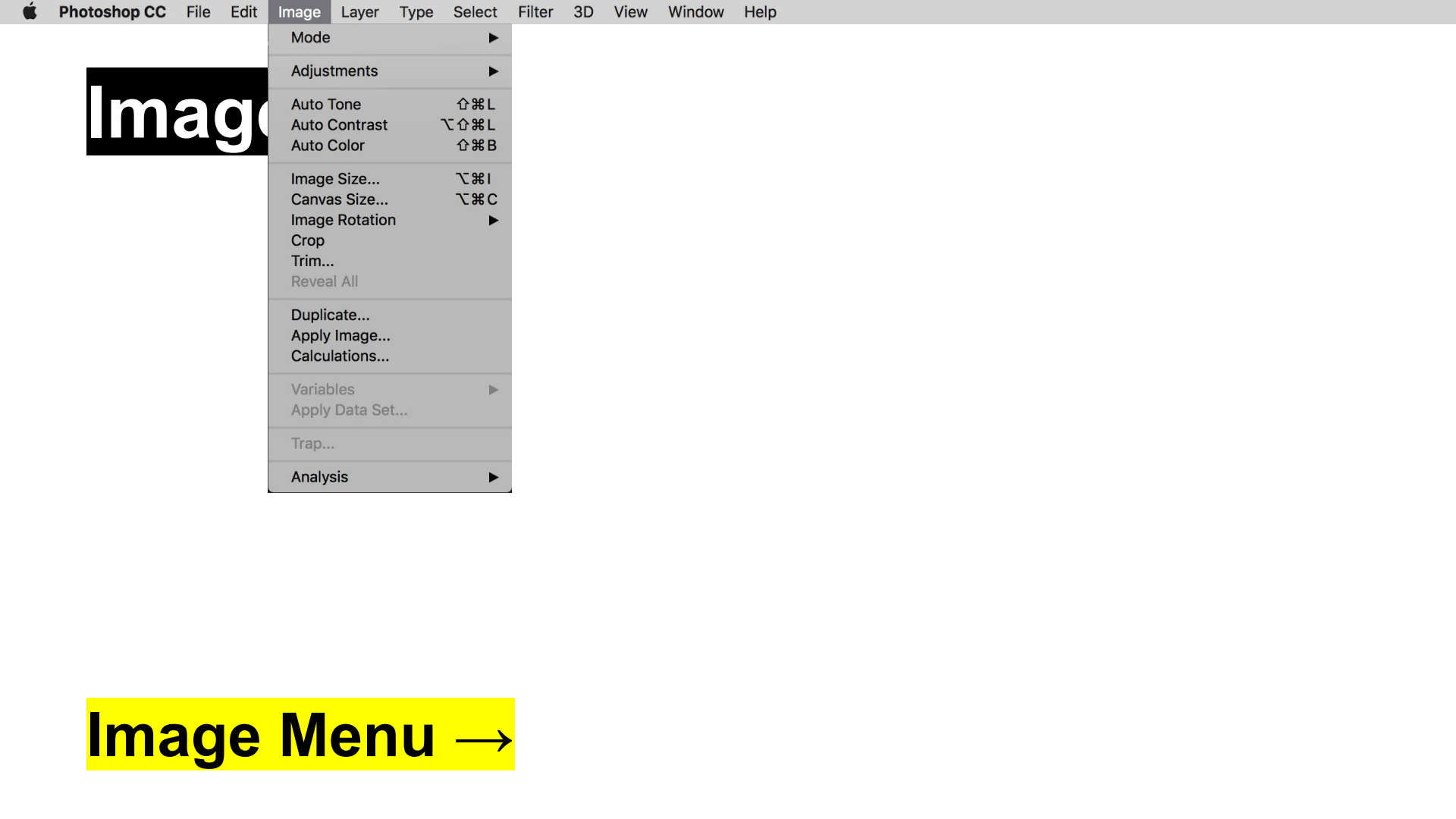
# Image Menu

# Image Menu




# Image Menu

**Image Menu →**


Photoshop CC File Edit Image Layer Type Select Filter 3D View Window Help
Mode
Adjustments
Auto Tone ⇧⌘L
Auto Contrast ⌥⇧⌘L
Auto Color ⇧⌘B
Image Size... ⌥⌘I
Canvas Size... ⌥⌘C
Image Rotation
Crop
Trim...
Reveal All
Duplicate...
Apply Image...
Calculations...
Variables
Apply Data Set...
Trap...
Analysis
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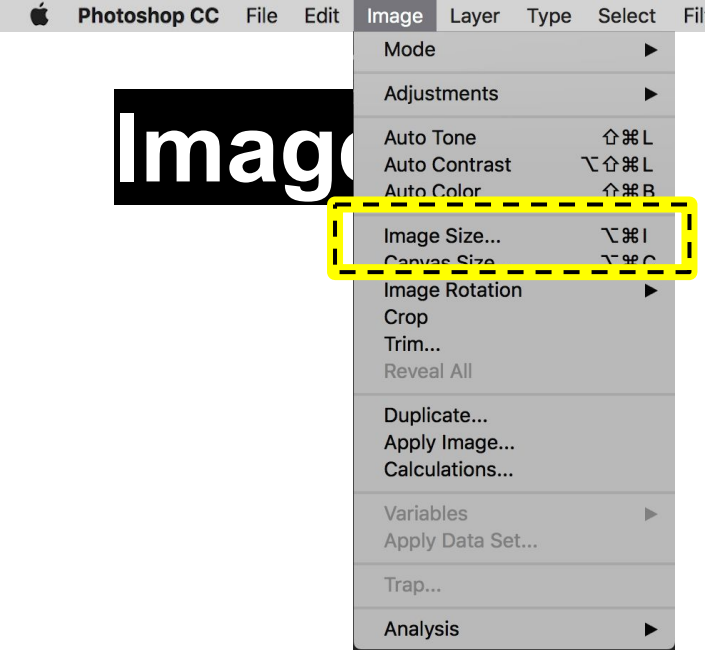
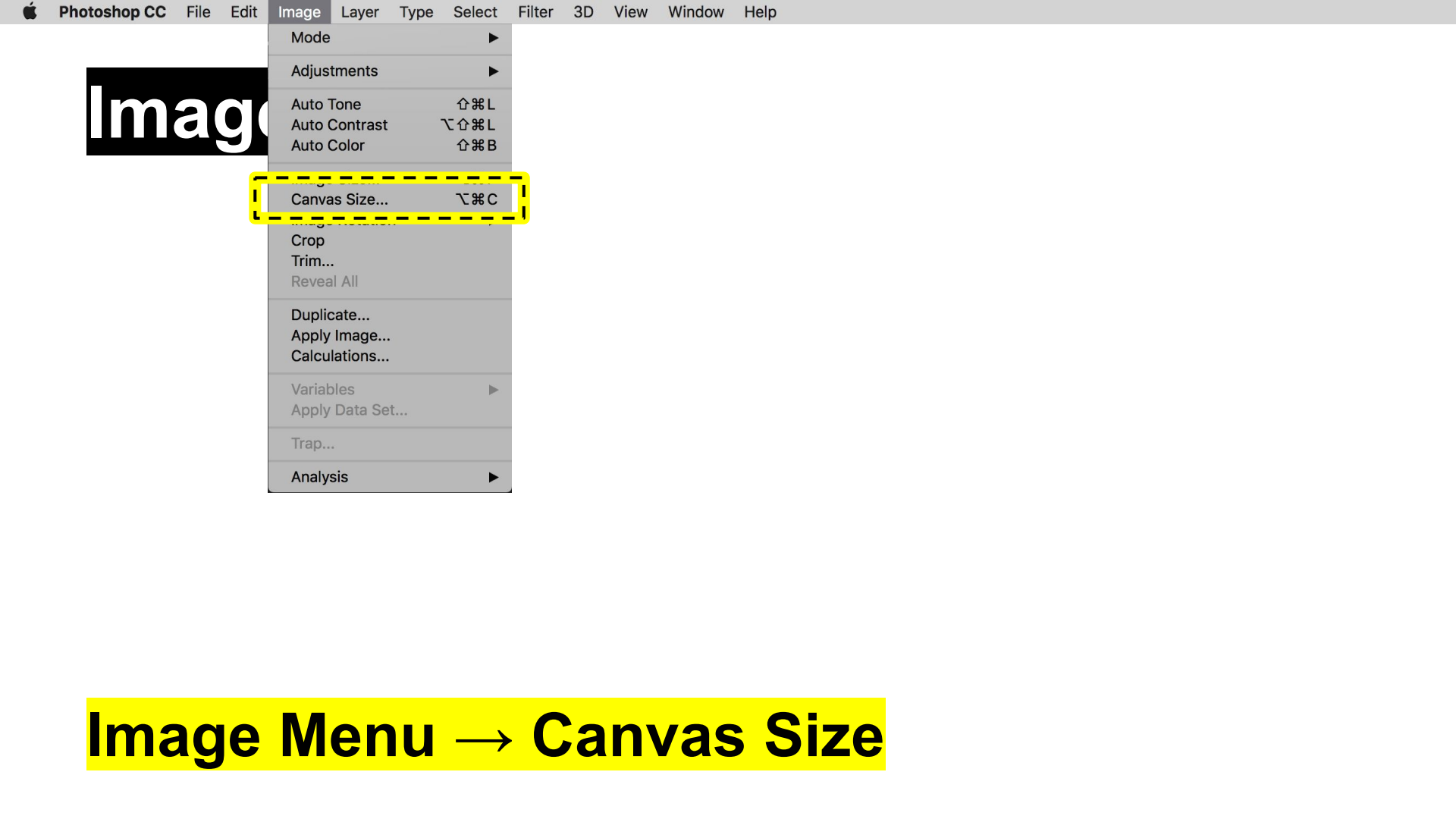
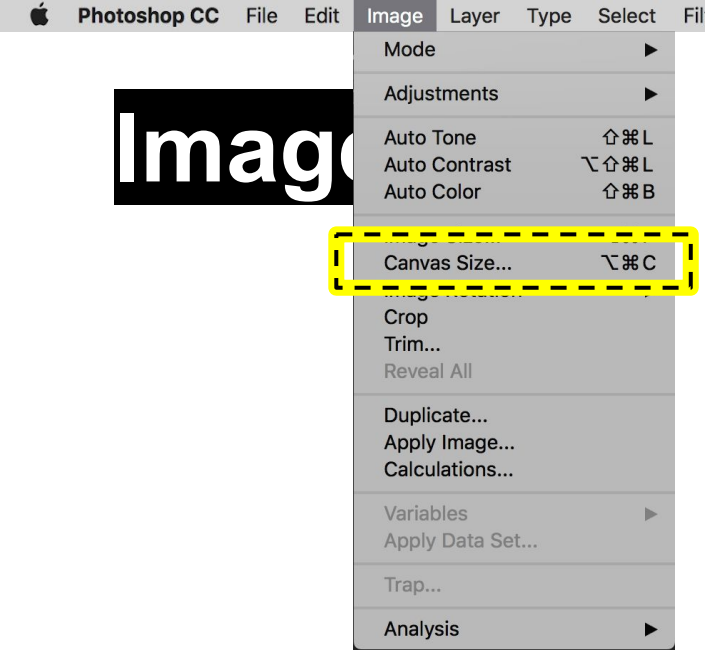



Make the image larger or smaller.

**Image Menu → Image Size**

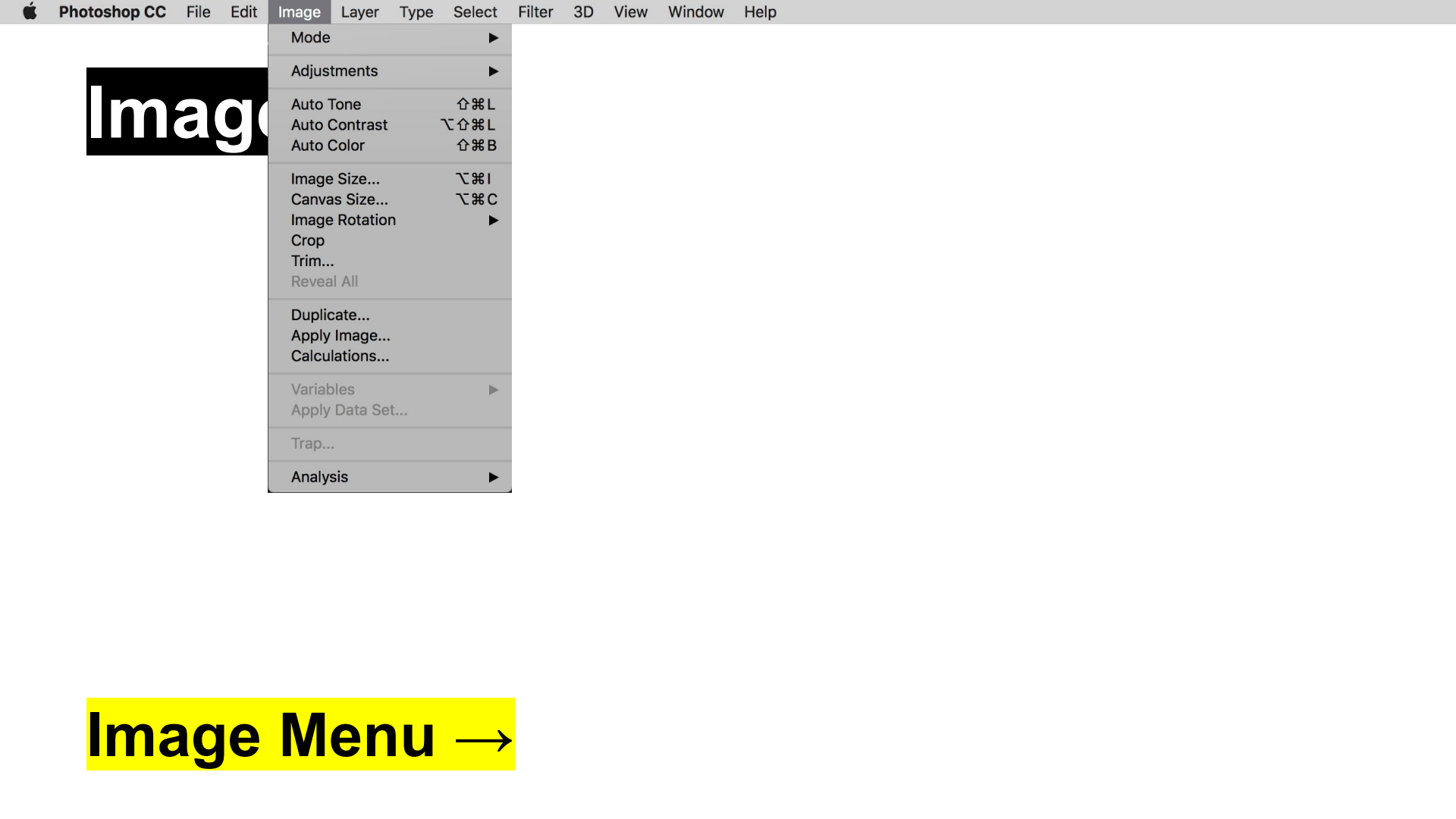

Photoshop CC File Edit Image Layer Type Select Filter 3D View Window Help
Mode
Adjustments
Auto Tone ⇧⌘L
Auto Contrast ⌥⇧⌘L
Auto Color ⇧⌘B
Canvas Size... ⌥⌘C
Crop
Trim...
Reveal All
Duplicate...
Apply Image...
Calculations...
Variables
Apply Data Set...
Trap...
Analysis
Image Menu → Canvas Size

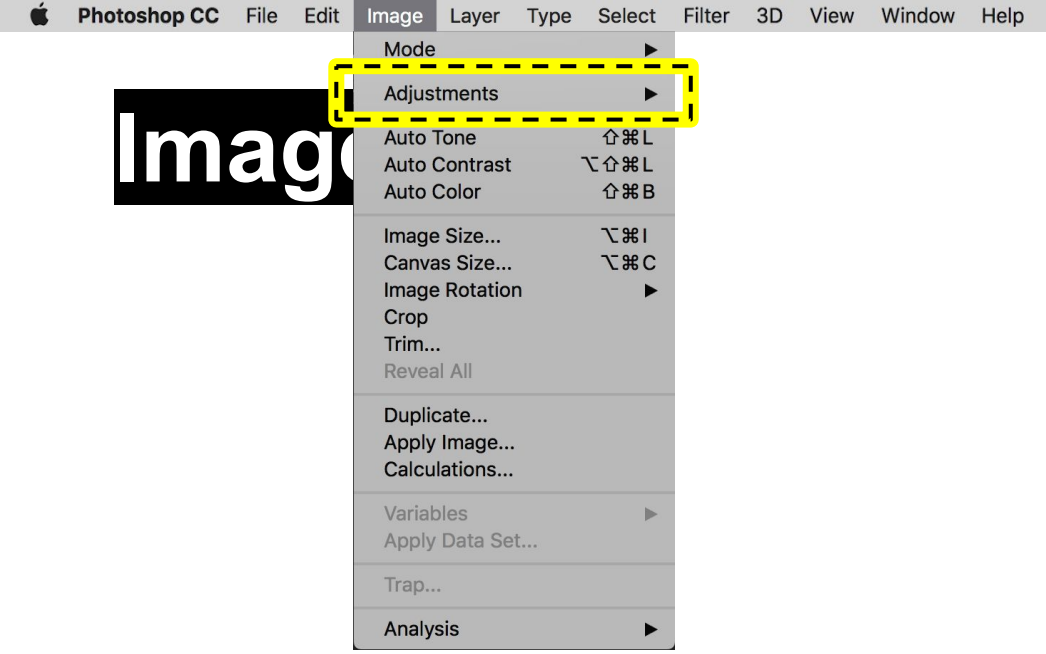



# Imag

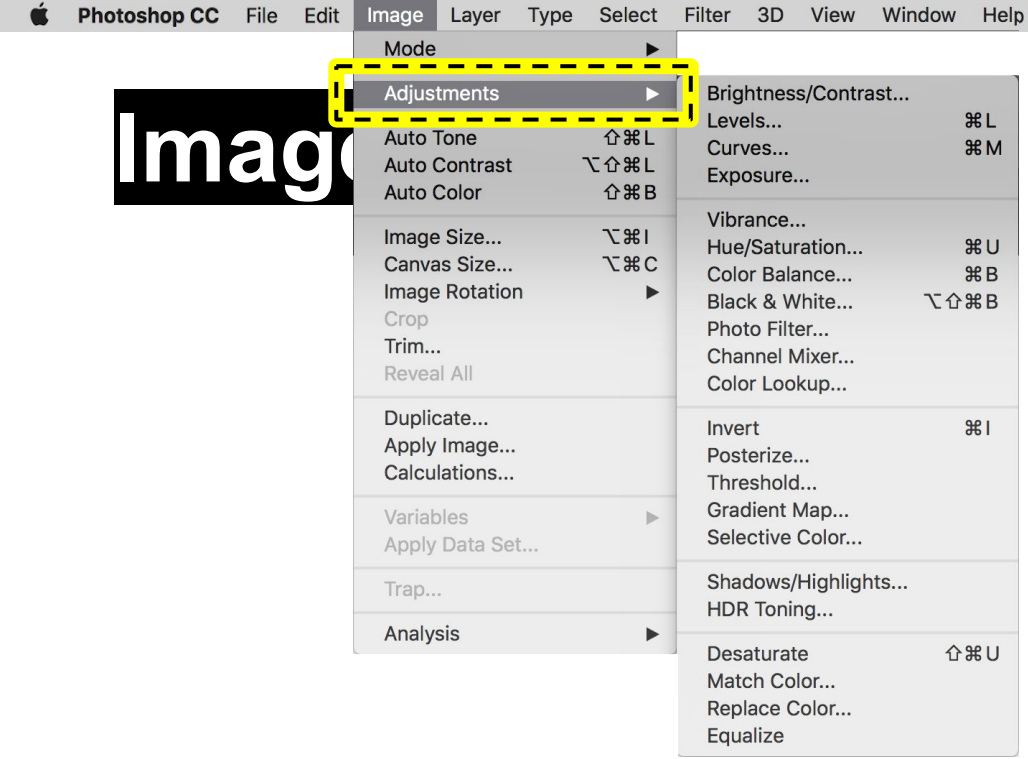
Add blank space to the edges or crop the image.

**Image Menu → Canvas Size**

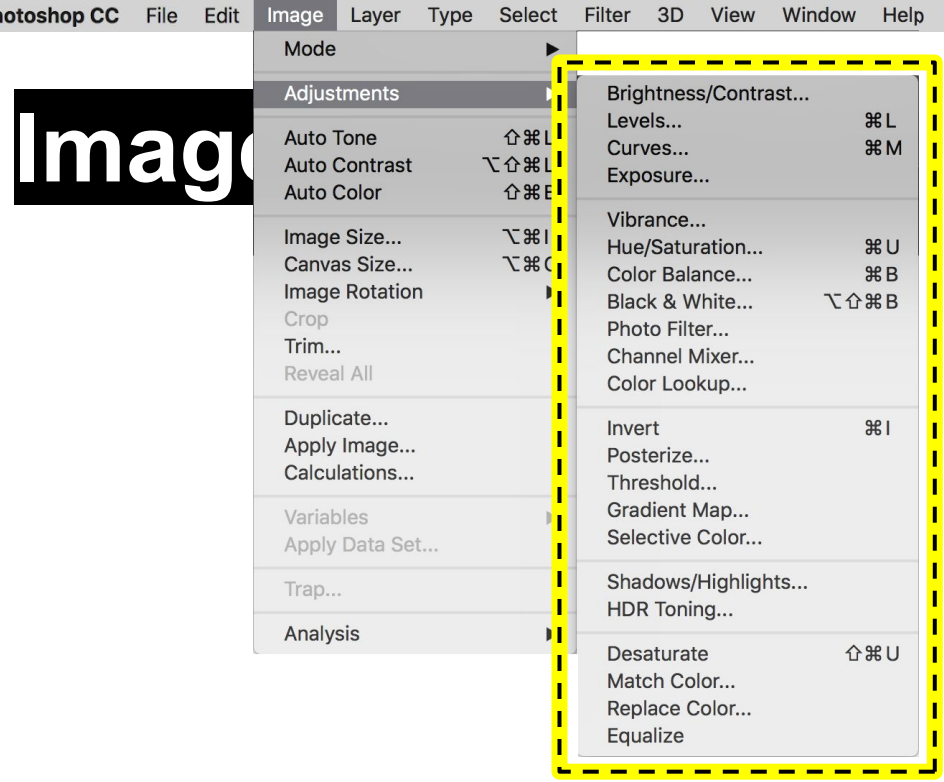

Photoshop CC File Edit Image Layer Type Select Filter 3D View Window Help
Mode
Adjustments
Auto Tone ⇧⌘L
Auto Contrast ⌥⇧⌘L
Auto Color ⇧⌘B
Image Size... ⌥⌘I
Canvas Size... ⌥⌘C
Image Rotation
Crop
Trim...
Reveal All
Duplicate...
Apply Image...
Calculations...
Variables
Apply Data Set...
Trap...
Analysis
Image Menu →




# Image Menu → Adjustments




# Image Menu → Adjustments




# Image Menu → Adjustments

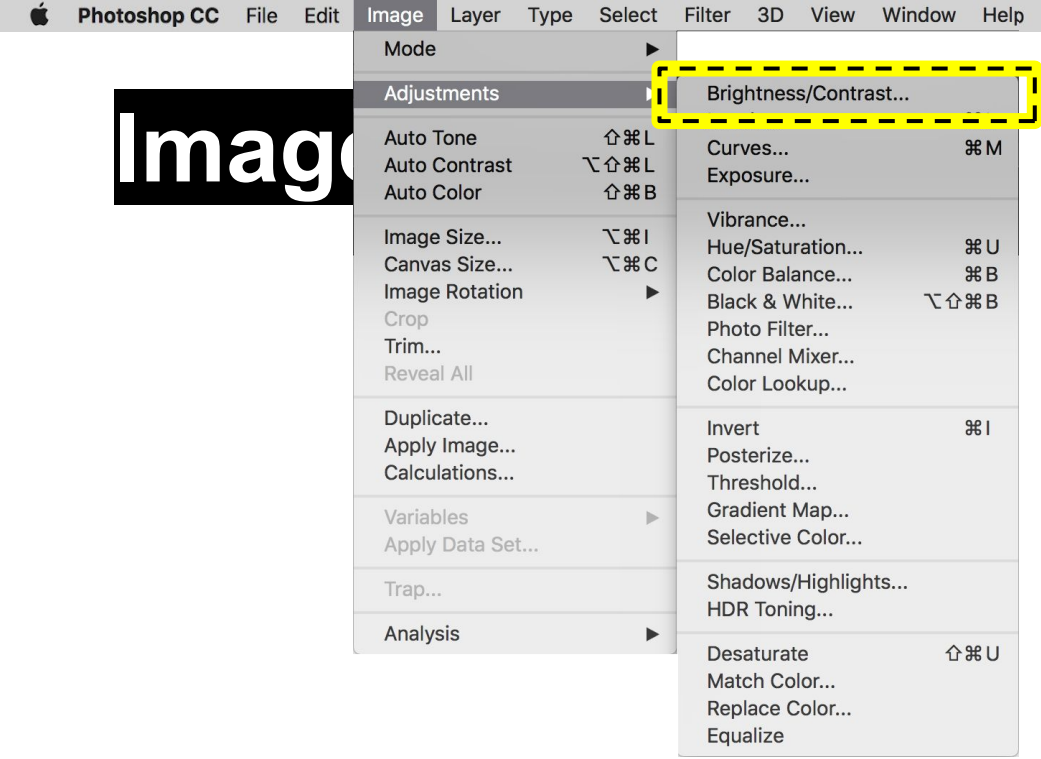
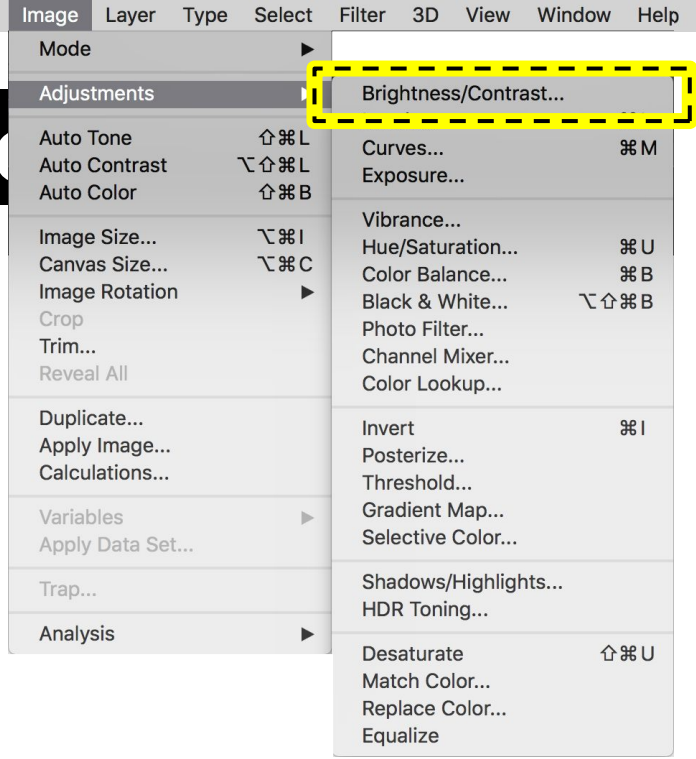



**Image Menu → Adjustments → Brightness/Contrast**

# Imag




(Adjust brightness and contrast to make the image more balanced, and define shadows and highlights more clearly).

**Image Menu → Adjustments → Brightness/Contrast**

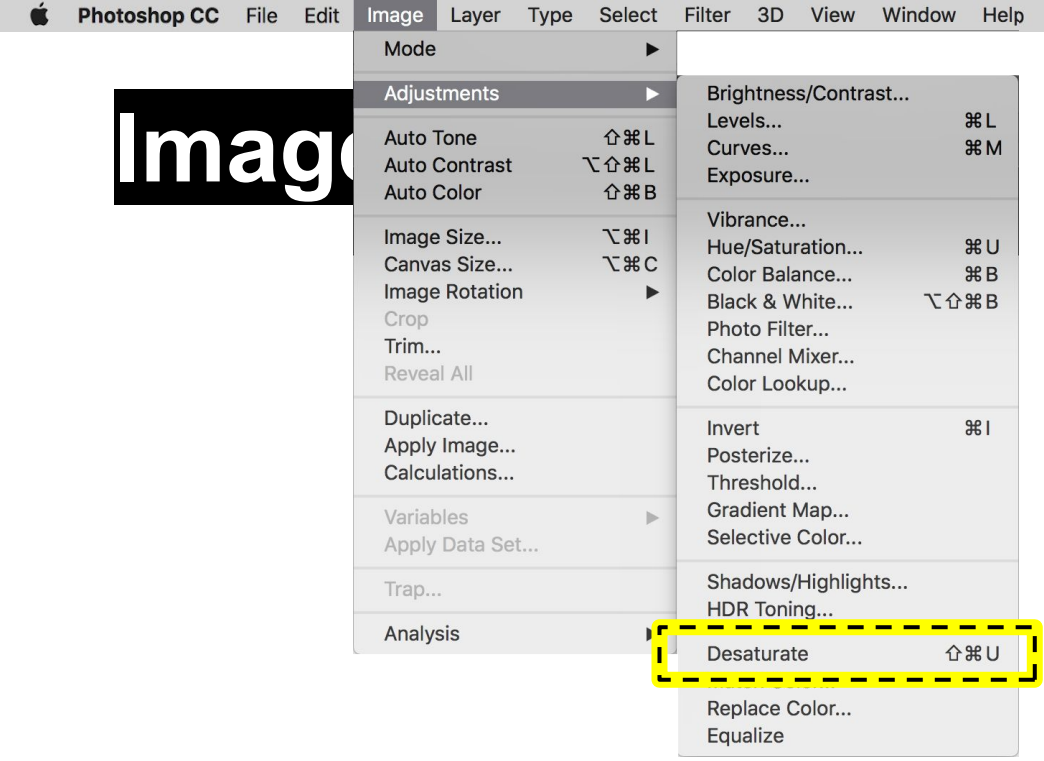
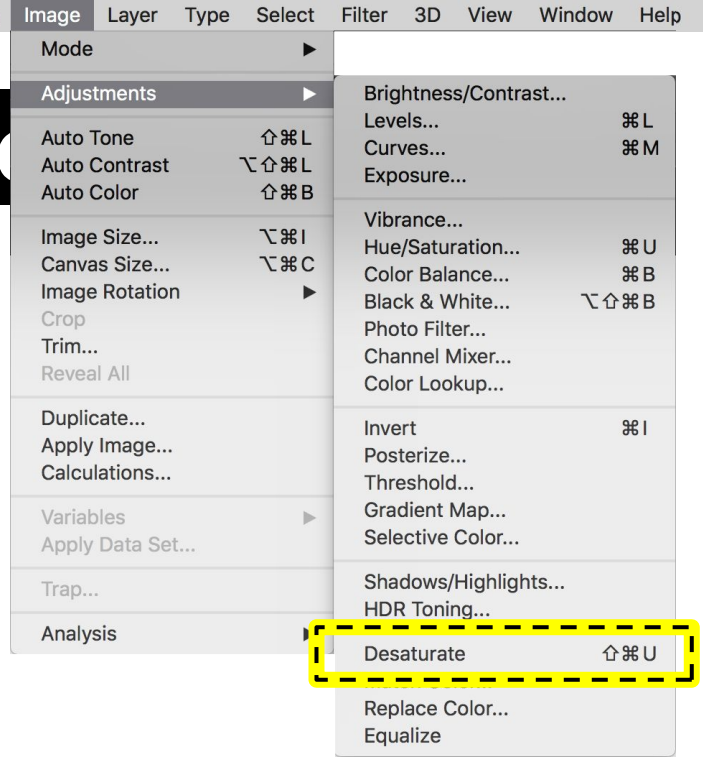



**Image Menu → Adjustments → Desaturate**

# Imag




(Make the image grayscale).

**Image Menu → Adjustments → Desaturate**

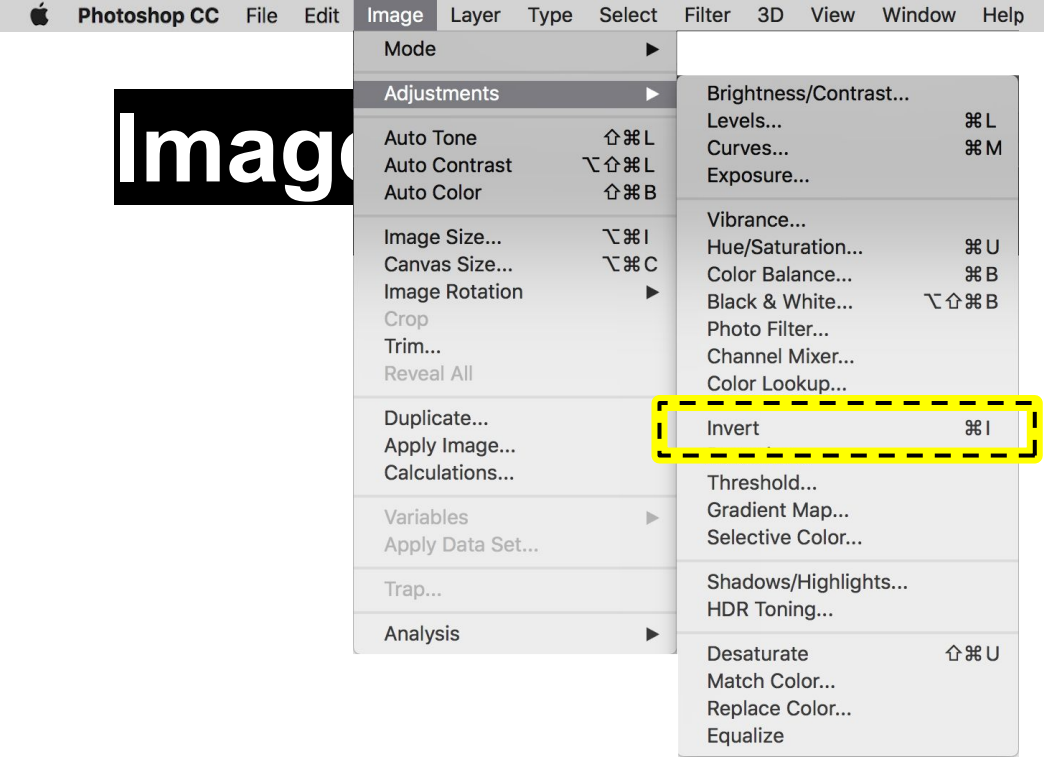
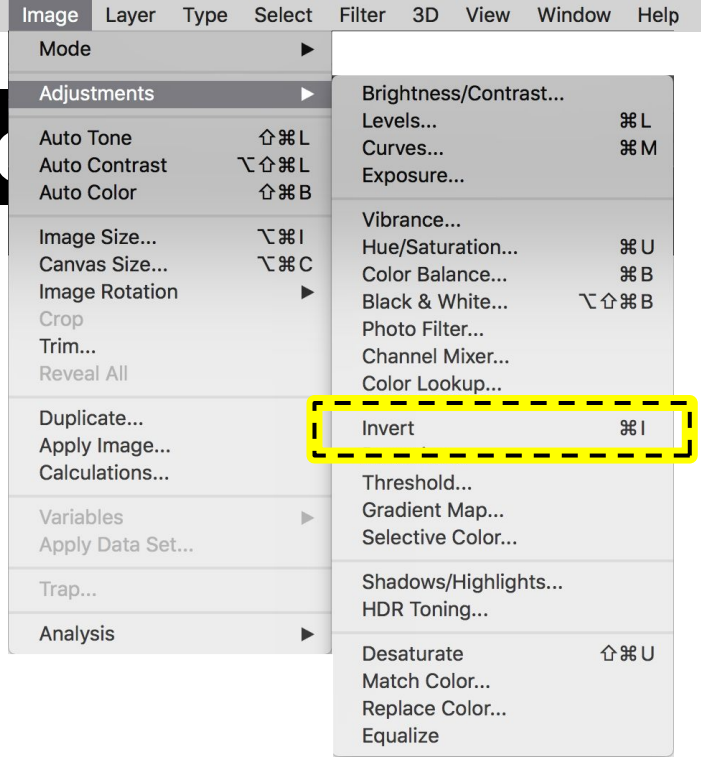


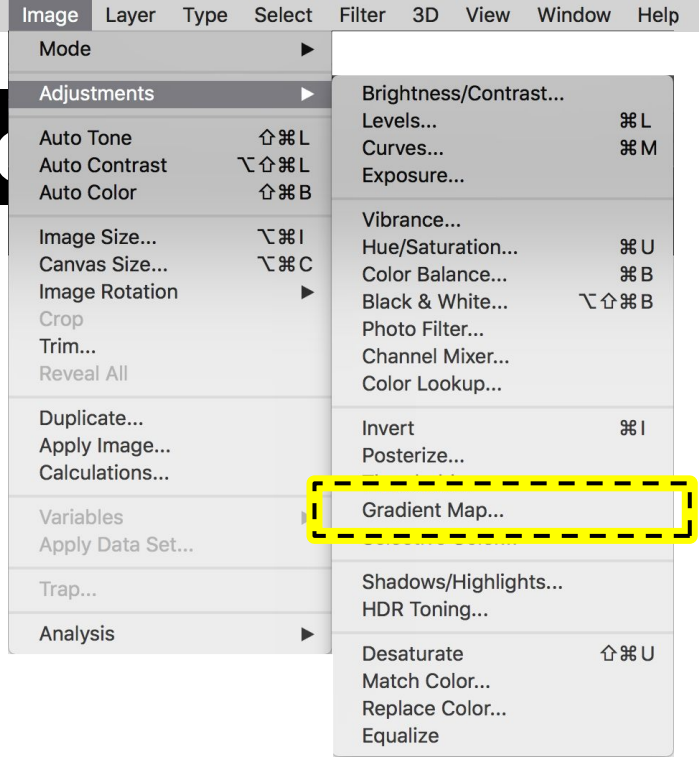

**Image Menu → Adjustments → Invert**

# Image



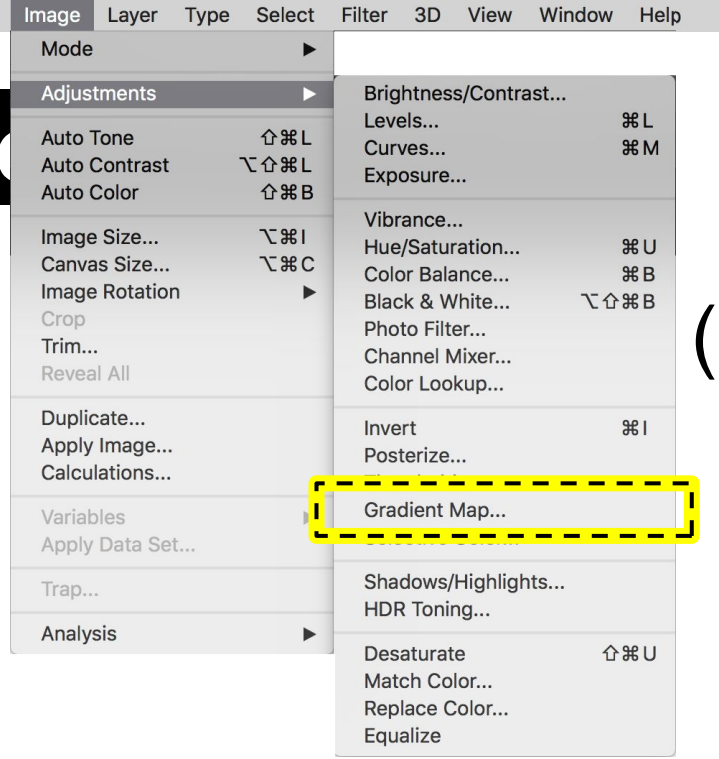

(Make bright values dark and make dark values bright).

**Image Menu → Adjustments → Invert**




# Image Menu → Adjustments → Gradient Map

# Imag




(Remap the spectrum from dark values to bright values across the image).

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# Halftone Patterns

# Halftone Patterns

Halftone was originally used as a means to accurately reproduce photographic imagery on printing plates.

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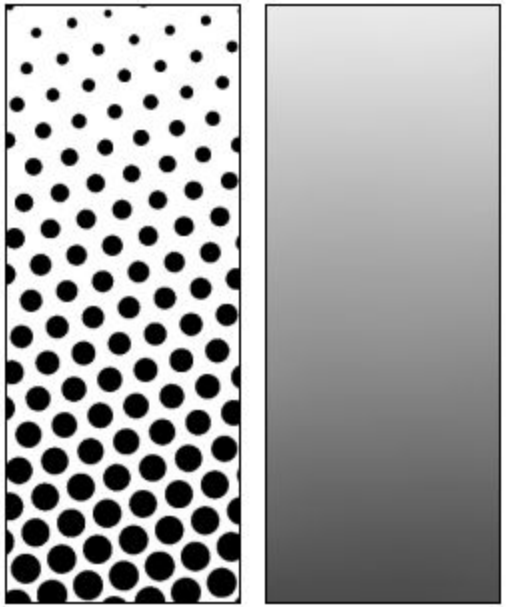
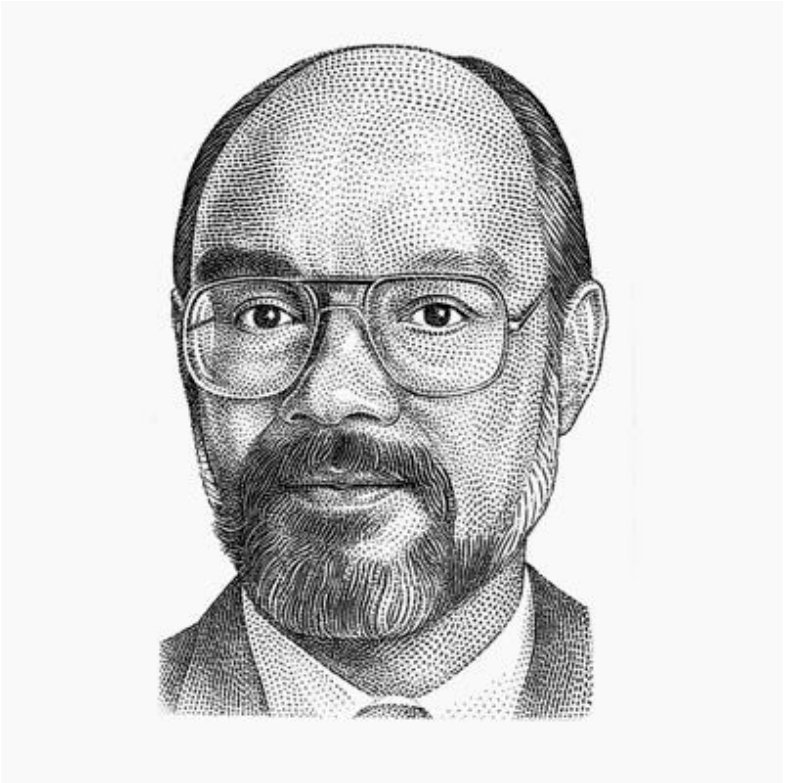
Halftone was originally used as a means to accurately reproduce photographic imagery on printing plates.



# Halftone Patterns

“Hedcut” style stipple portrait
Kevin Sprouls, *The Wall Street Journal*

# Halftone Patterns



“Hedcut” style stipple portrait
Kevin Sprouls, *The Wall Street Journal*

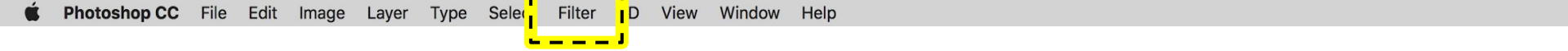
# Halftone Patterns

***Superman***, 1938
Jerry Siegel & Joe Shuster

# Halftone Patterns

***M-Maybe he became ill and couldn't leave the studio***, c. 1965
Roy Lichtenstein
93.5 x 93.5 cm. (36.8 x 36.8 in.)

# Halftone Patterns




# Halftone Patterns

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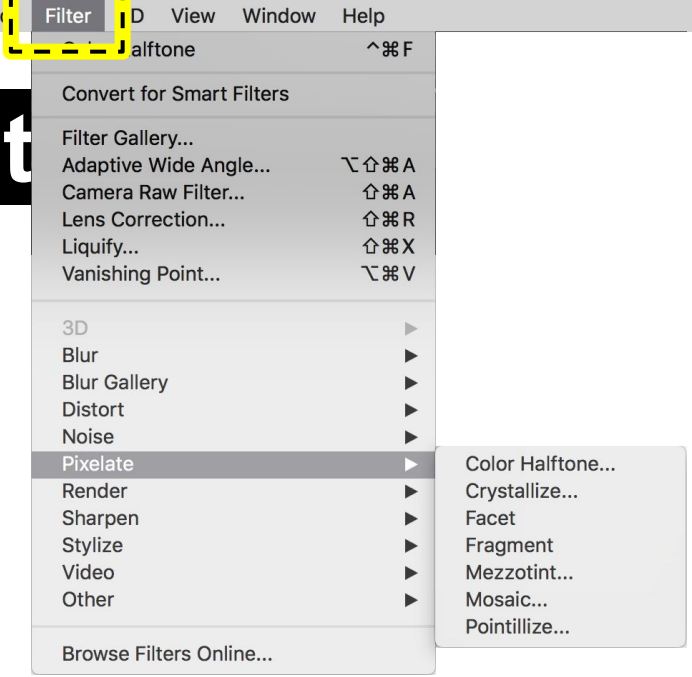
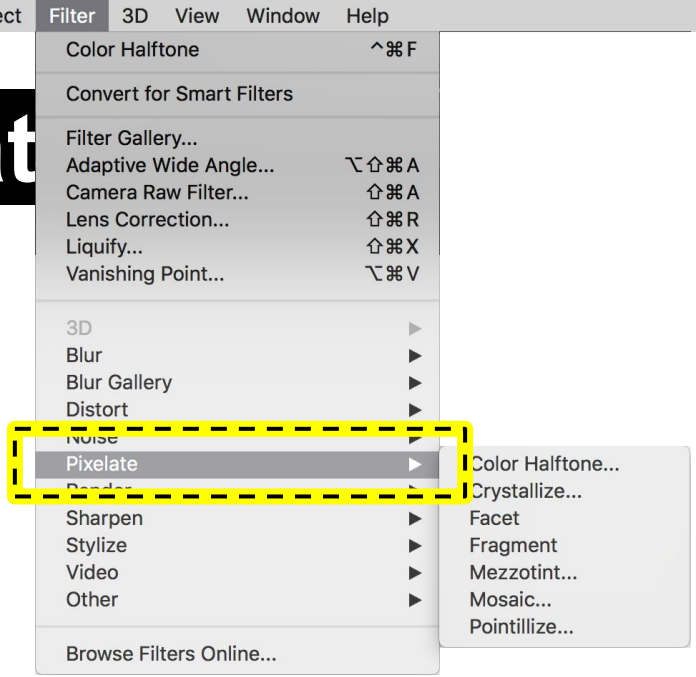
# Halftone Pat



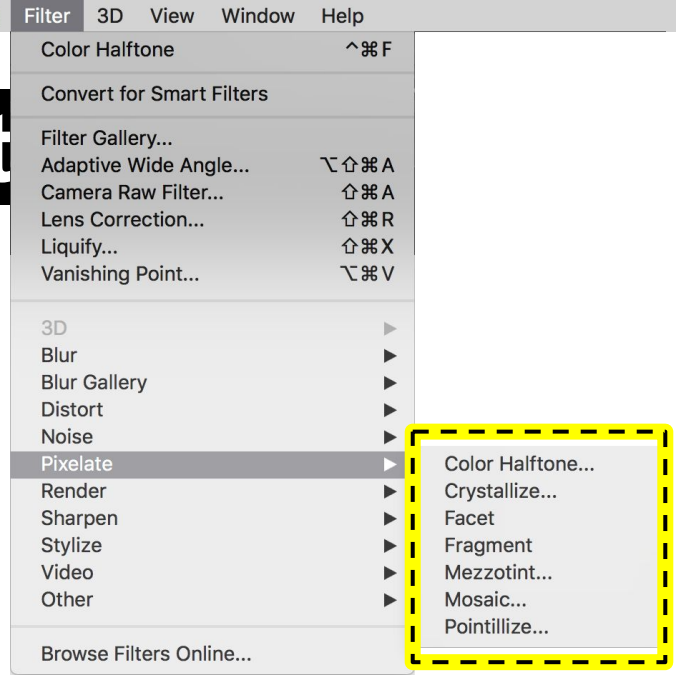

**Filter Menu →**

# Halftone Pat



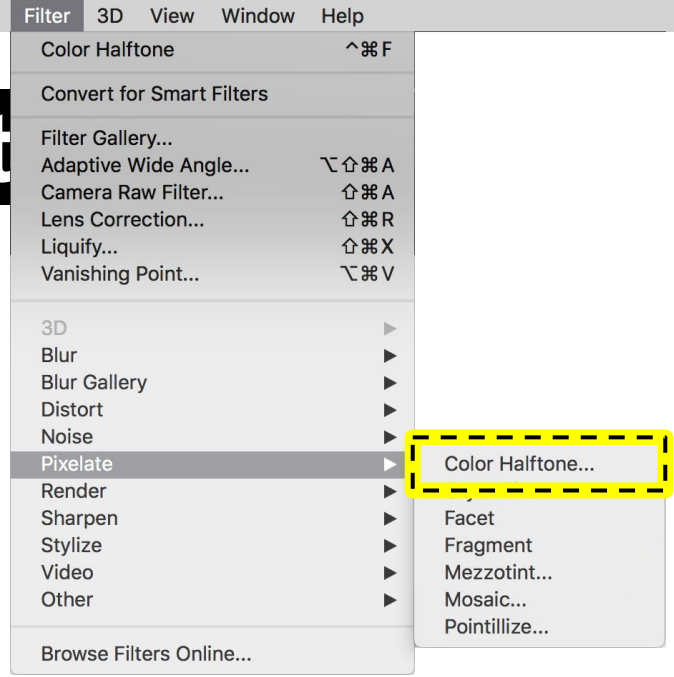

**Filter Menu → Pixelate**

# Halftone Pat



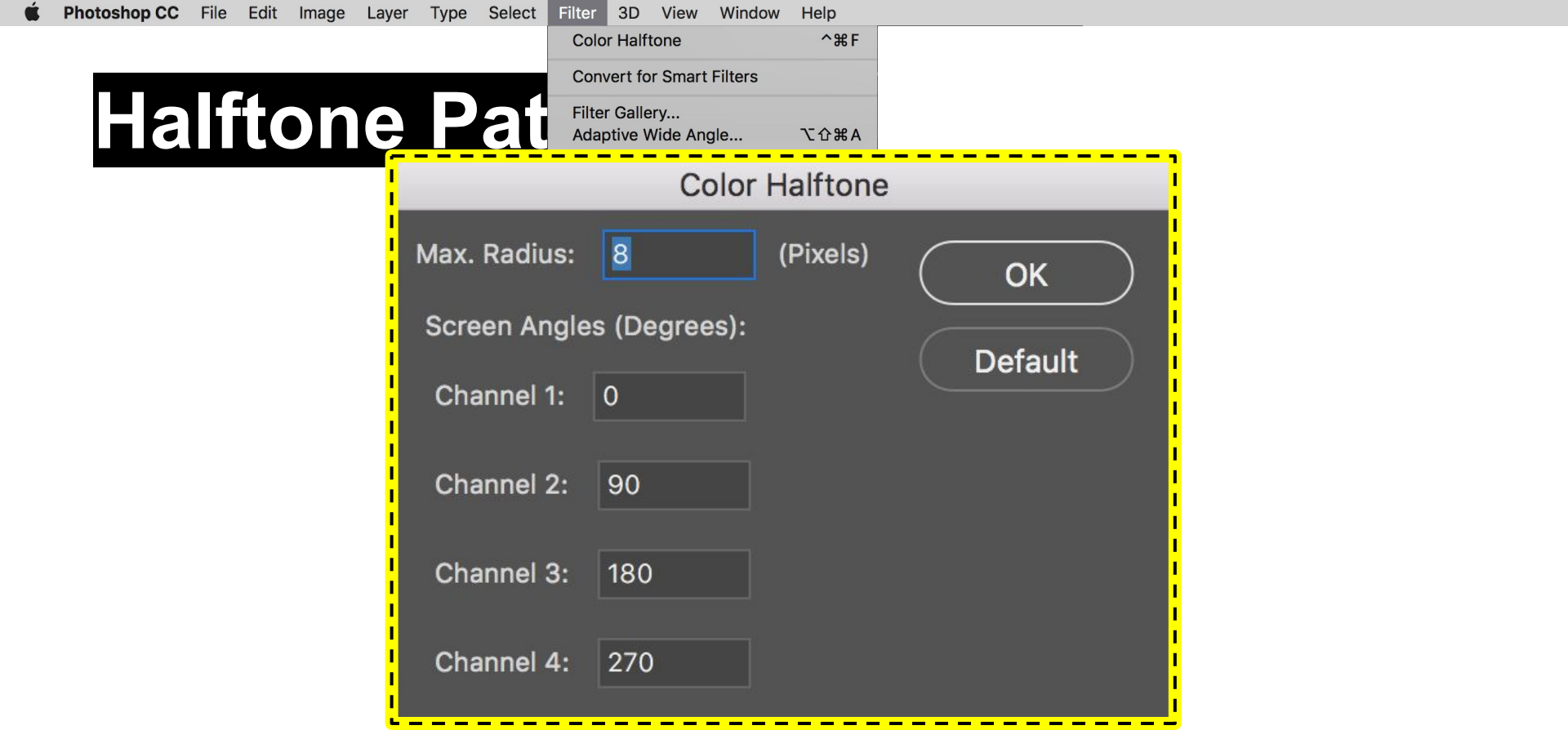

**Filter Menu → Pixelate**

# Halftone Pat




**Filter Menu → Pixelate → Color Halftone**

# Halftone Pat




**Filter Menu → Pixelate → Color Halftone**

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