

Segmentation Tutorial-

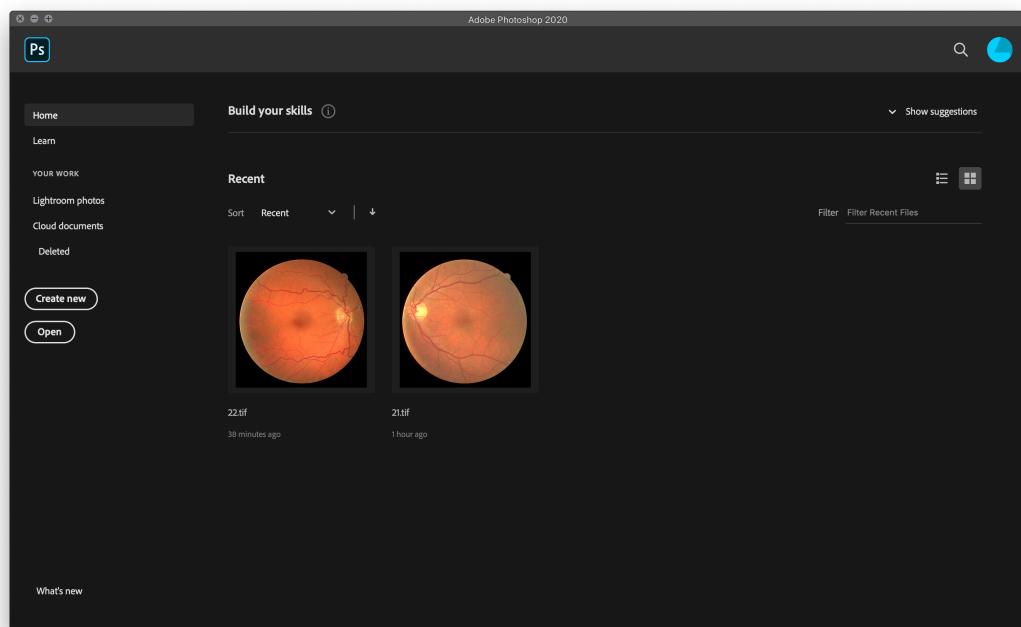
Red : Arteries

Blue : Veins

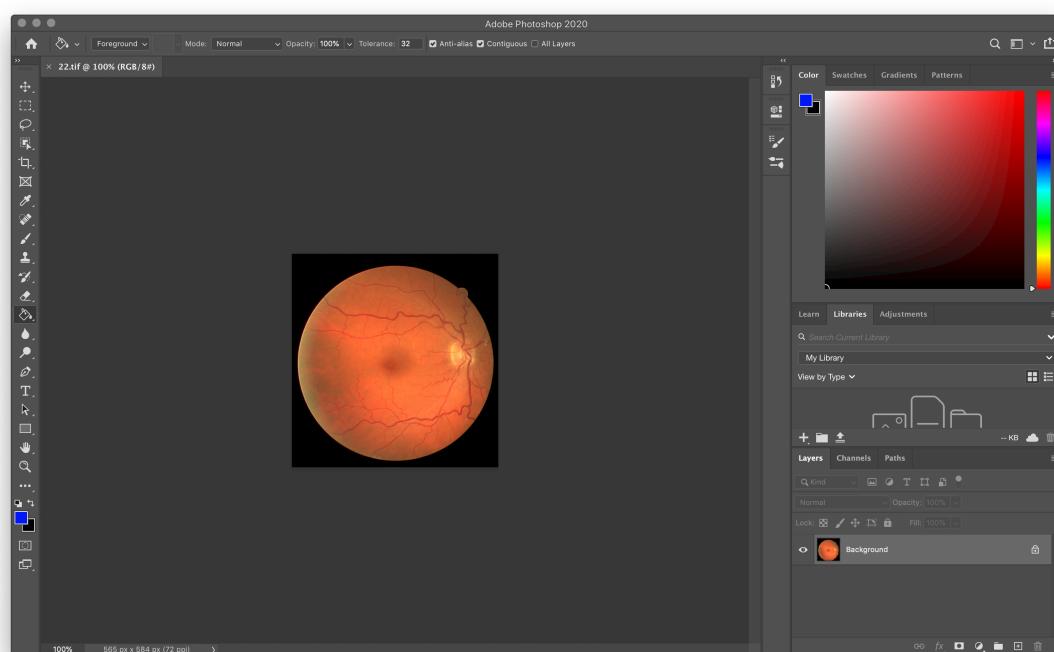
Green : Can not be classified

Steps -

- 1) Go to open.

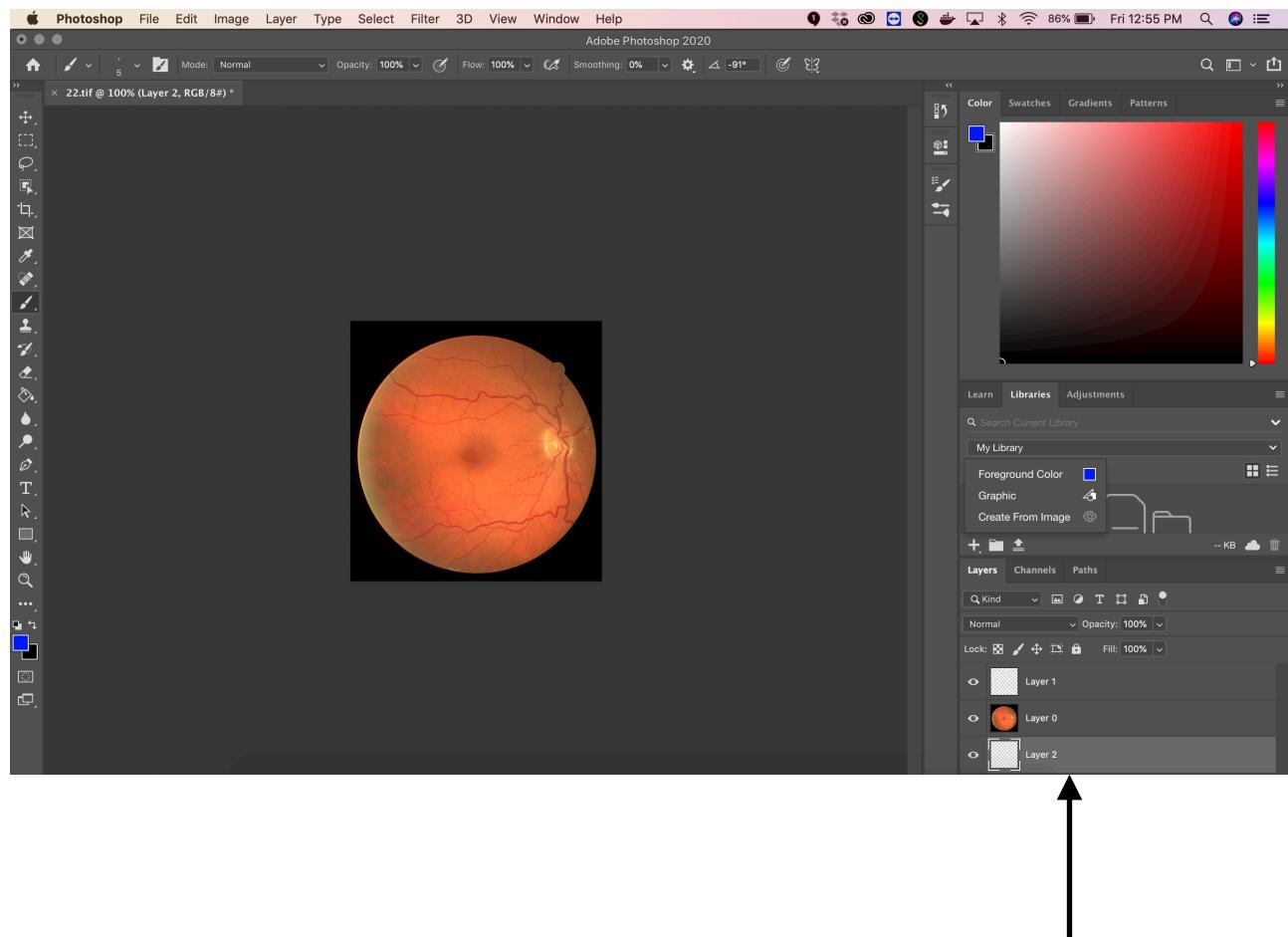


- 2) Choose the image to be segmented.



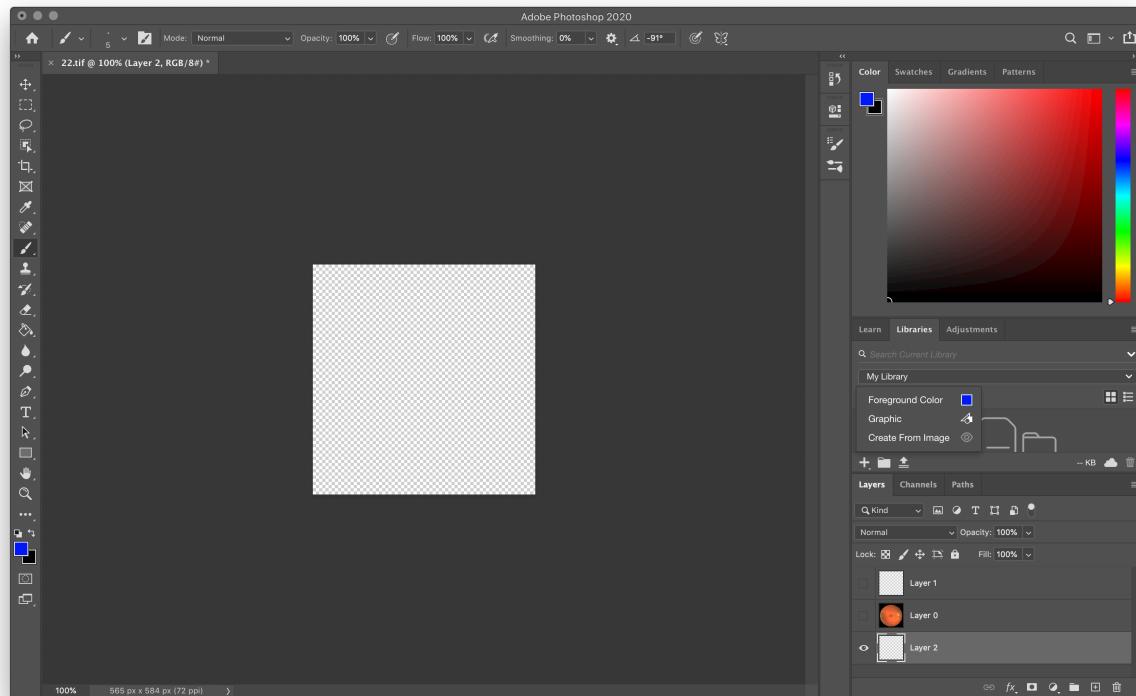
3)Create 3 layers -

- a) By going to Layer icon on the topmost task bar.
- b) Create New Layer.(You have to create 3 layers in this way and in the order given in the pic)

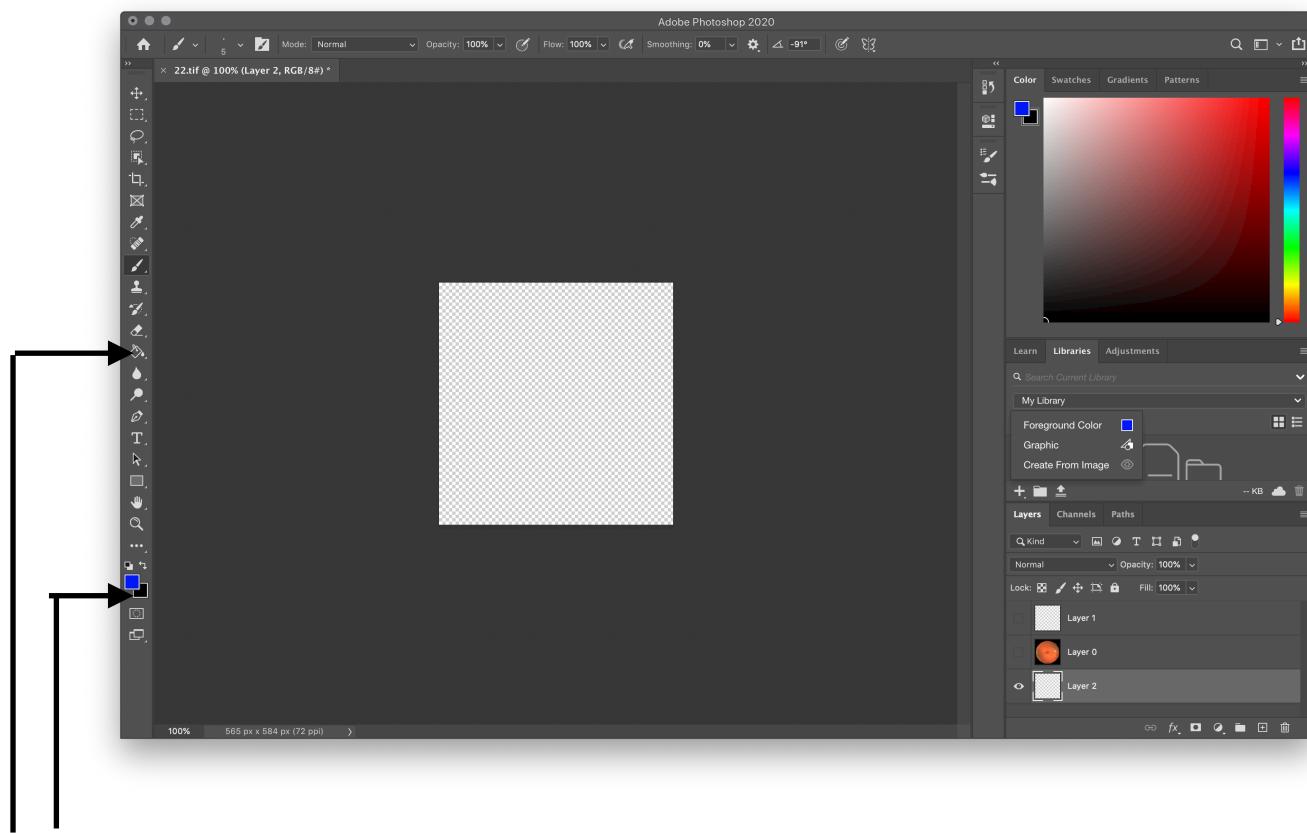


You can see the created 3 layers here.

4)Select the last layer and uncheck the rest of the layers.

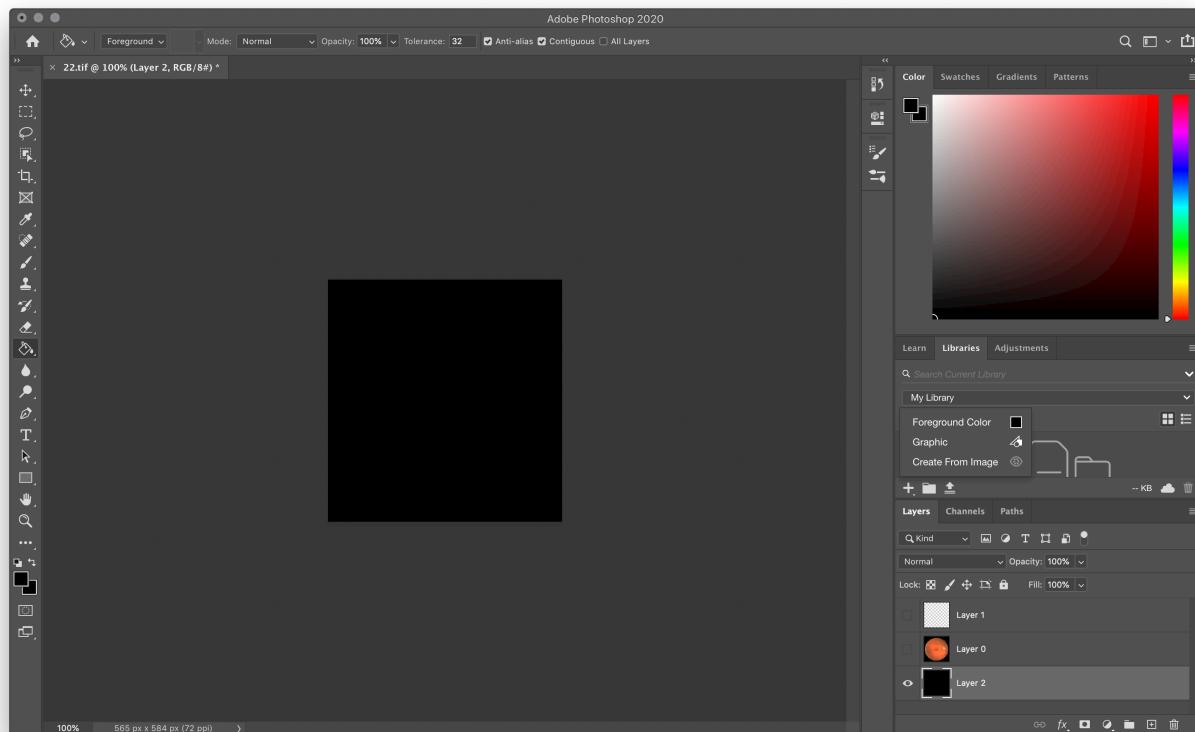


5)Select Paint Bucket in the left toolbar and select colour black.

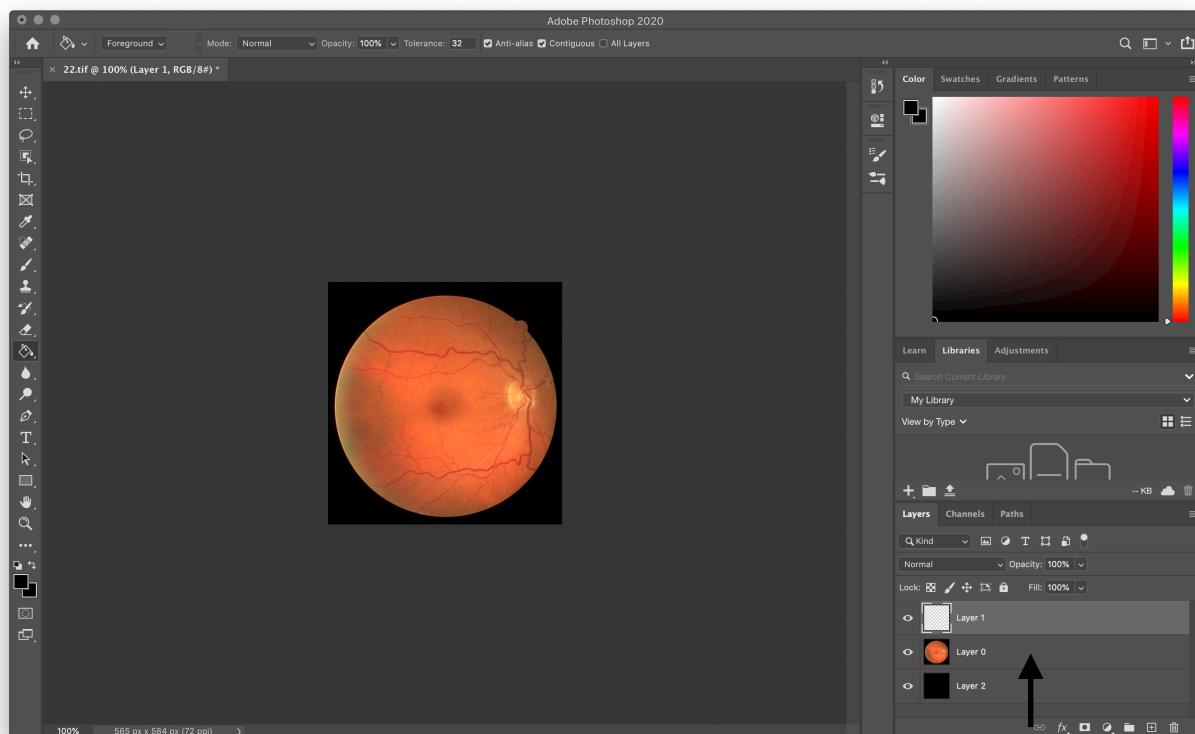


Paint Bucket
Color selection

Output after doing above things -



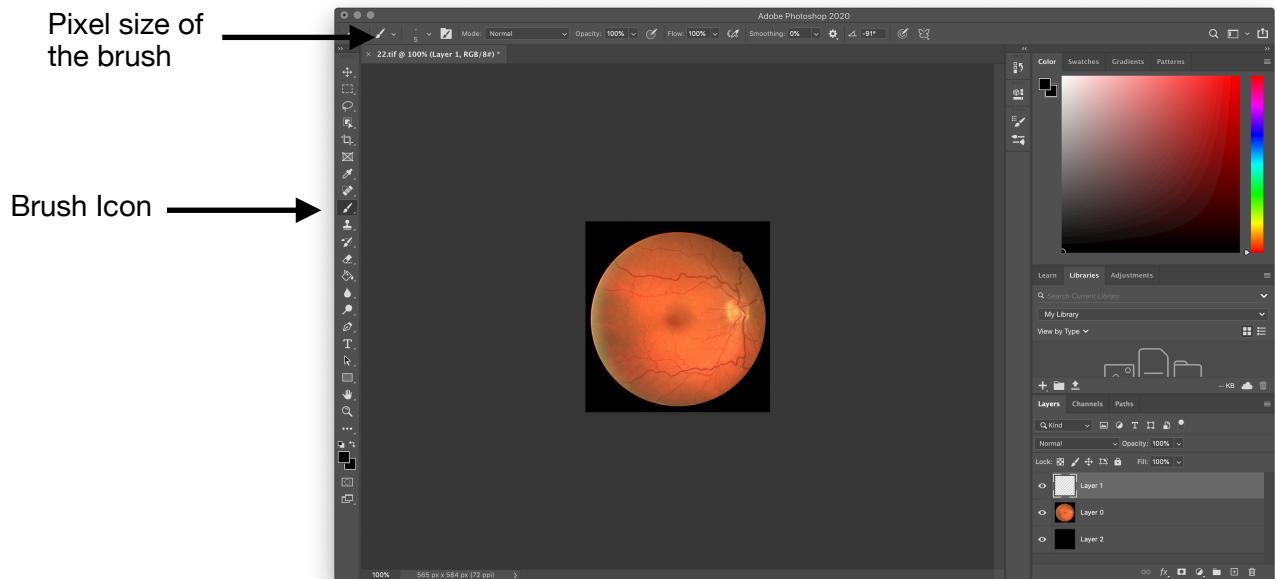
6) Now check every layer and select the first empty layer-



You can see the every layer checked and first layer selected.

7) Now, you have to work on either first artery or vein or unclassified(Its the most efficient way). We are going to work on artery(red) in this example -

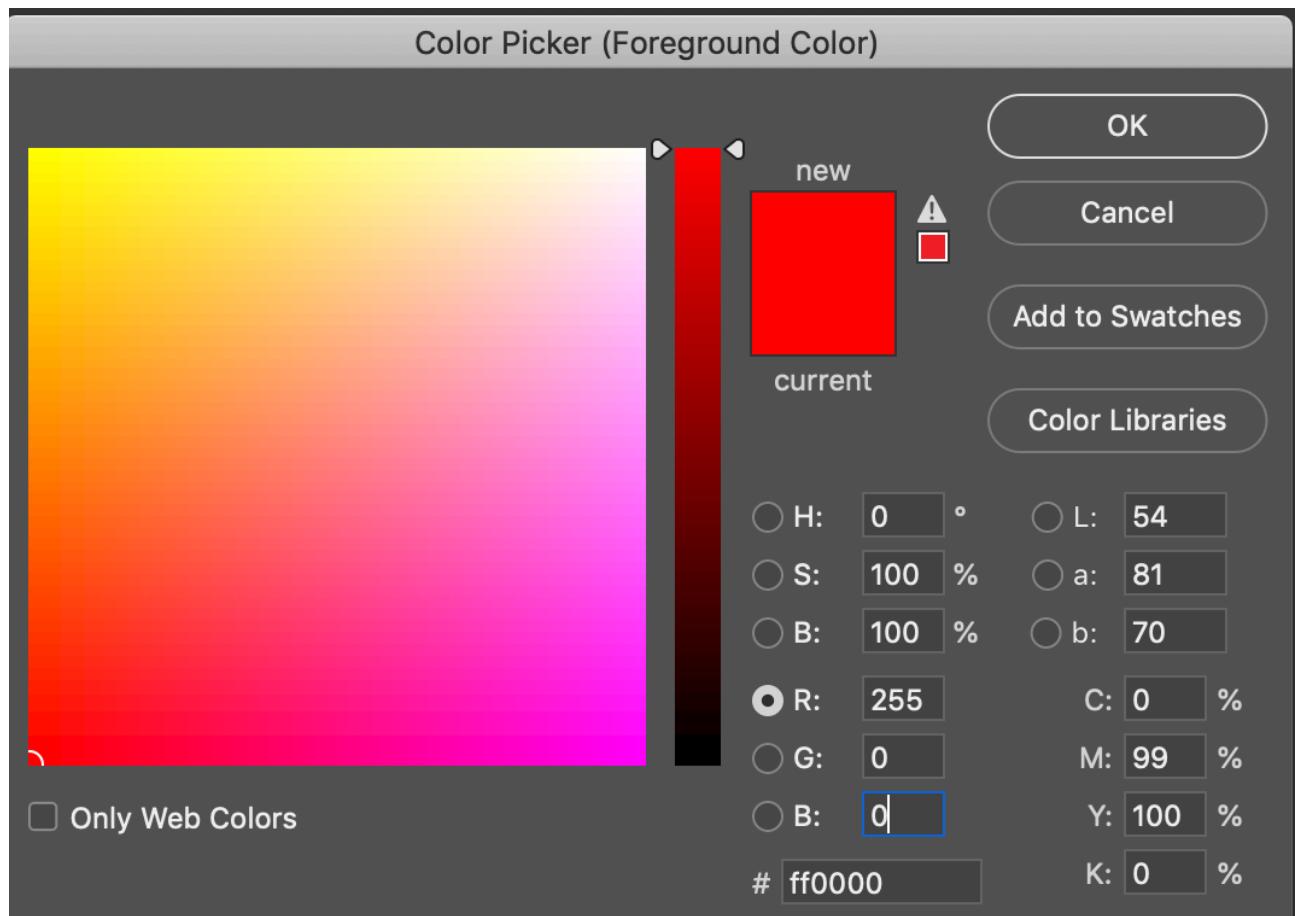
Choose the brush icon from the left toolbar.(You can select the pixel size of the brush too depending on how big the vessels is to be traced).



8) Change the colour to red to classify artery using colour selection.
You have to manually enter the RGB values of the required colour in the colour selection.

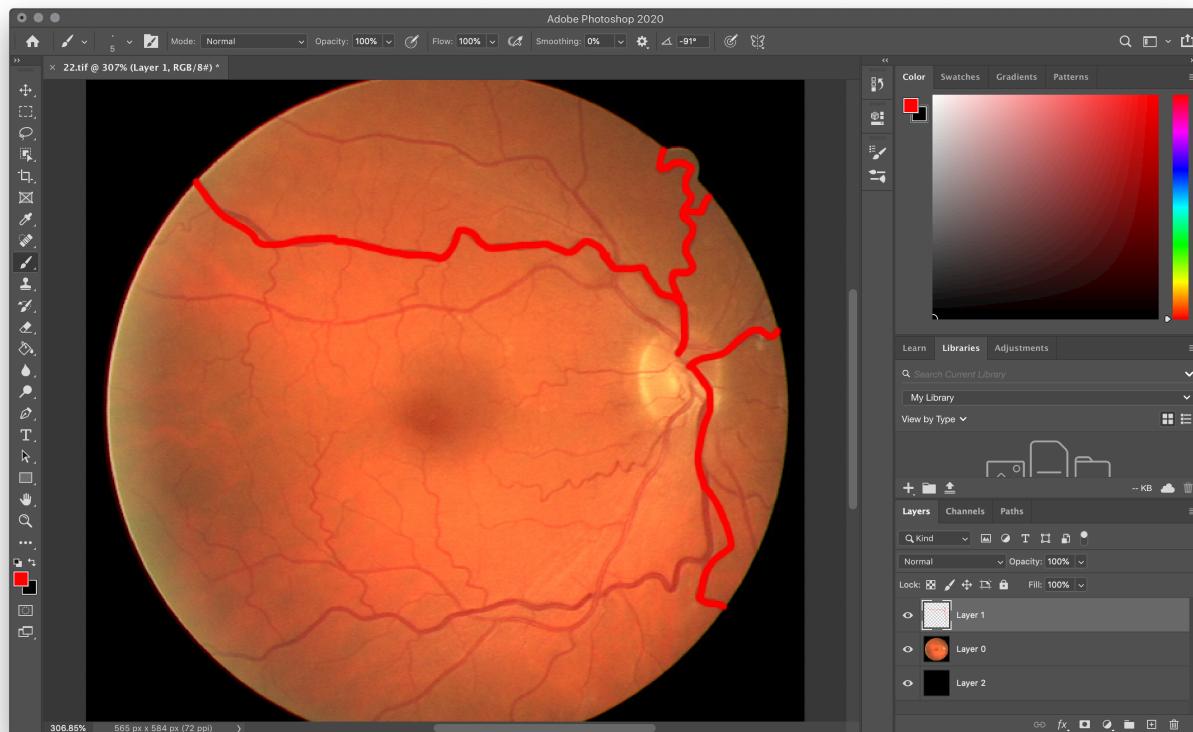
For

Red :255,0 ,0
Green: 0,255,0
Blue :0,255,255



9) You can zoom in according to requirement, adjust the pixel value of the brush and can start tracing-

You can also use the eraser to delete things, it s also in the left most toolbar.



10) Whenever you are done with the tracing, you could uncheck the middle layer and then save the image by going to File -> Save as.
File format should be .tiff

