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Assignment 3

Question 5

before texture synthesis



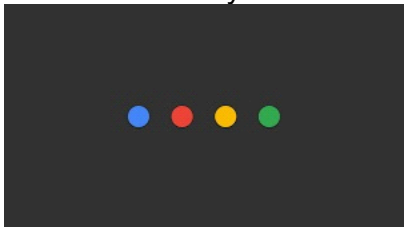
after texture synthesis



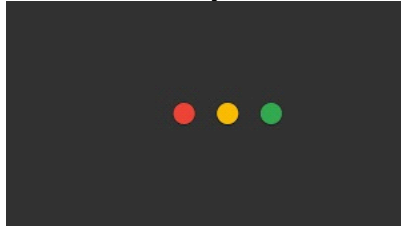
Question 6

1) Performing well

before texture synthesis



after texture synthesis

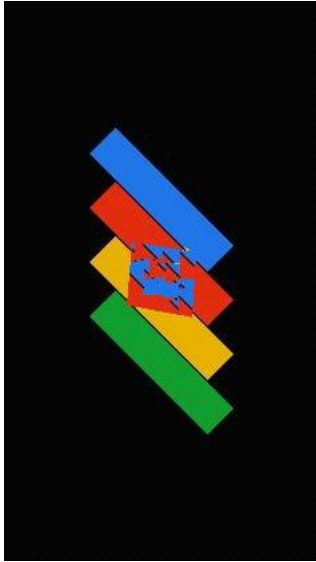


2) performing poorly

before texture synthesis



after texture synthesis



This Algorithm does not perform well in the second image that I am trying to remove Google Logo from the image and the reason would be that the texture area behind the selected patch is not distributed uniformly. So this algorithm finds a hard time to replace the logo with a proper patch that fits the background texture.

Question 7

- **randompatchSD**: it is used to calculate a gaussian value (Mean is zero), however it is compared to the size of the Hole, and the minimum is taken between them. So a large value would not effect the calculations, but a small value would mean the texture finding algorithm would take a longer time to go through the pixels of the picture to find a good match.
- **patchL** : This is used to offset from the hole to find a good texture to replace with. As the patchL gets bigger the sample size gets bigger; which may effect calculations (Although if it's too close to the edge of the image, or is larger than

the image itself, it will throw an error). A larger offset may reduce accuracy of the patches taken from sample textures resulting in unrealistic ones.