Programming Assignment 1 Report **Ege Ustunel**
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Assoc. Prof. Dr. Erkut ERDEM Lab Date: 19/10/2018
TA: Ozge Yalcinkaya Due Date: 11/2/2018

Part 1

Image Masking

In this part we are expected to use related image masks to extract foreground objects.

When we extract the foreground objects from the image using masks, we get the results above.

Changing Background

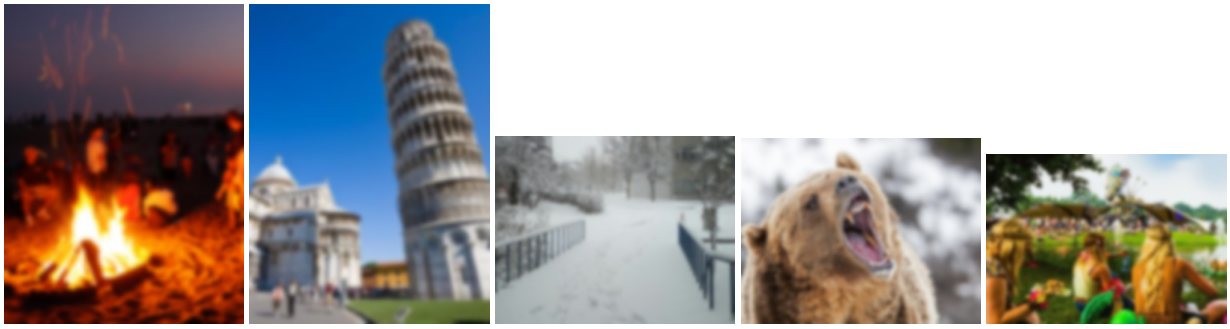
In the next objective we are expected to change the background of the foreground objects.

As it can be seen in the above images background of the images are changed.(Notice the third pictures background, it might be familiar to you.)

Part 2

Background Blurring

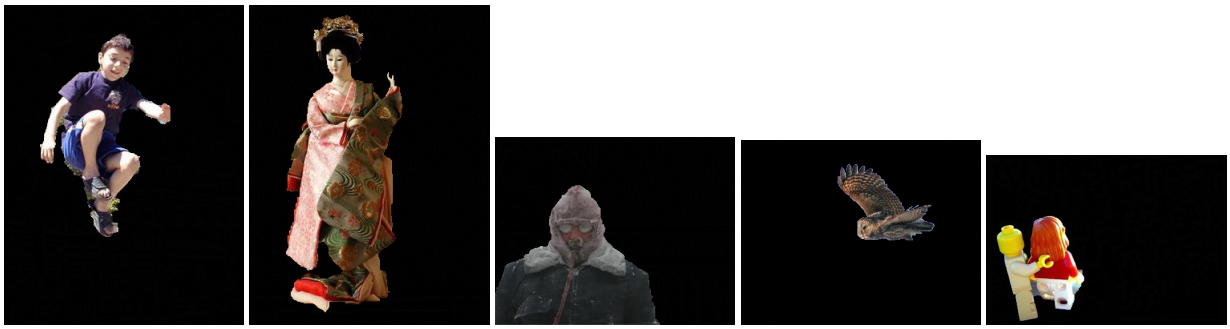
In this part we are expected to blur the backgrounds using gaussian blur. Below you can see the results of blurred images.



When I experimenting the gaussian kernel size and the sigma value I found that 100 for the kernel size and 3 for sigma value gave me the best results. If I lower the kernel size, the image got darker. For the bigger sigma value the image got more blurred. I thought 3 for the sigma value would be enough for the best result.

Sharpening Foreground

In this section we are expected sharpen the foreground images with unsharpen mask to get more details in the foreground image. Below you can see the results of the process.



After the sharpening operation I merged the sharpened foreground object with the blurred backgrounds. Below results can be seen.