

Assignment 2

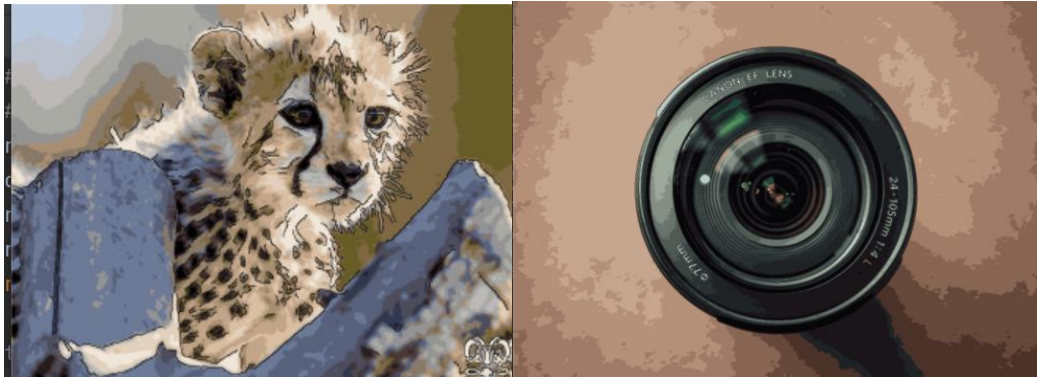
Alireza Gharavi

Code at :

<https://github.com/alirgharavii/ComputerVisionAssignment2>

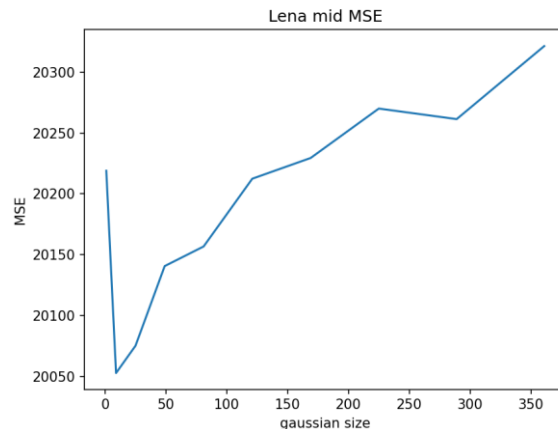
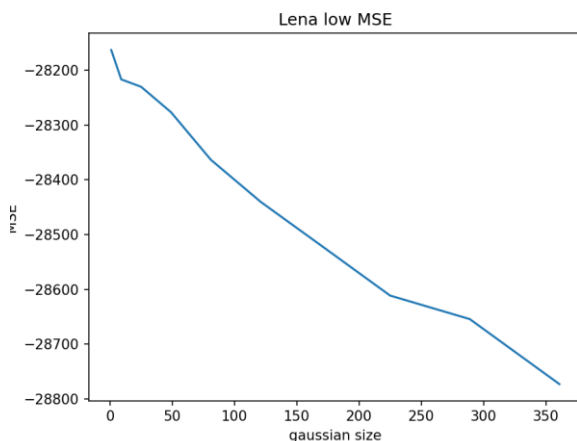
1: cartoonish image

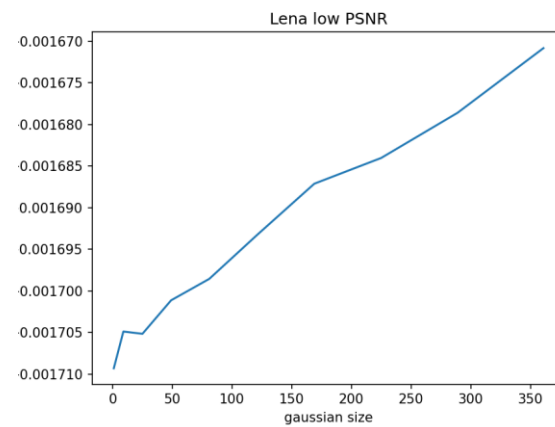
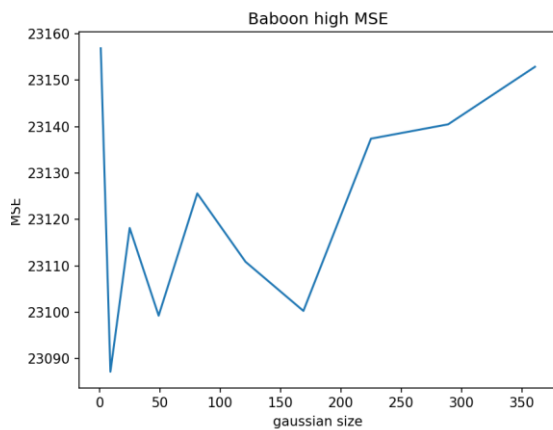
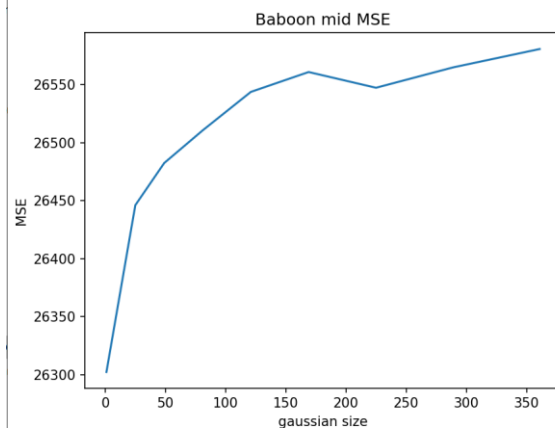
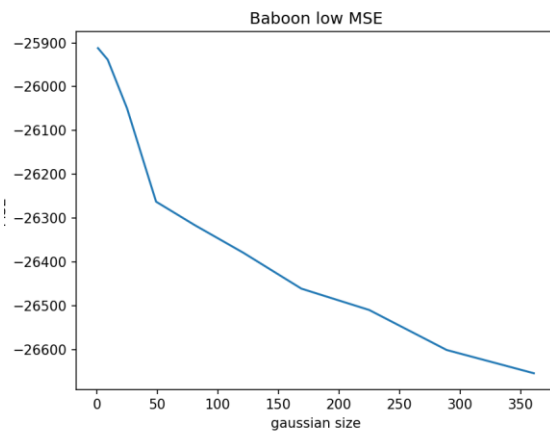
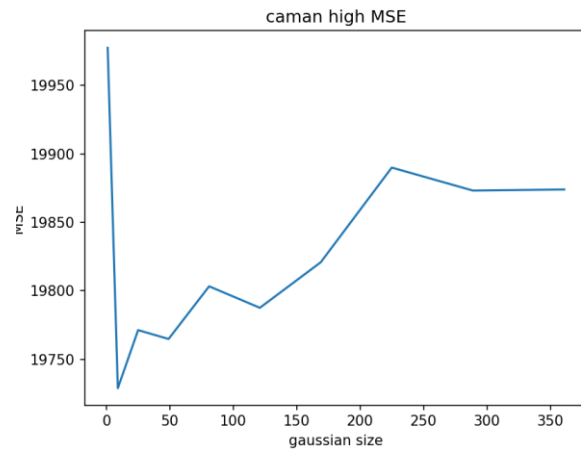
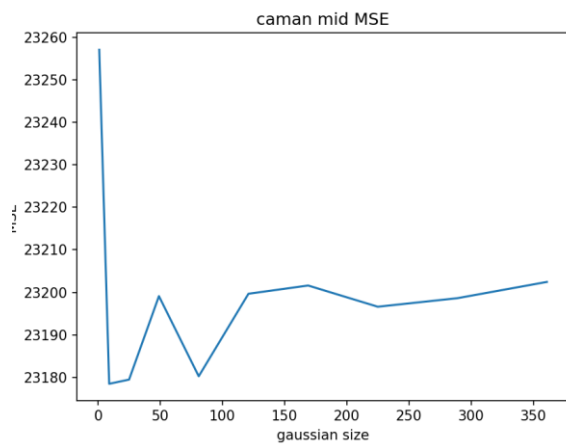
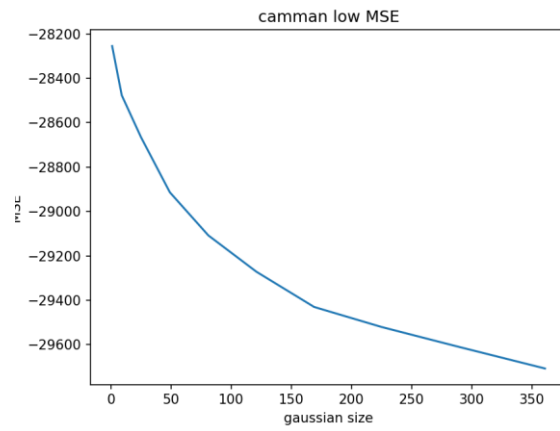
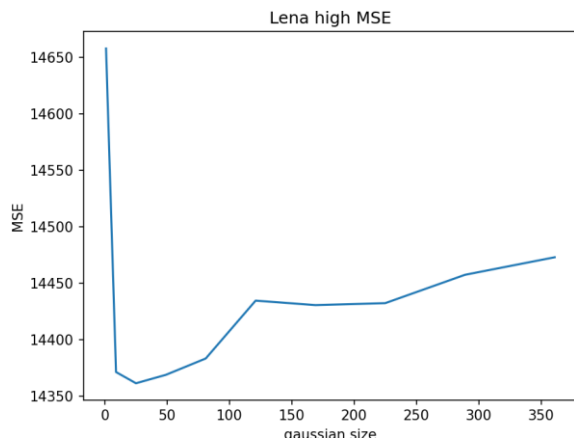
In this exercise I used canny edge detection for finding edges and k means function from previous assignment for limiting the color pool combining these 2 methods I could generate images like these:

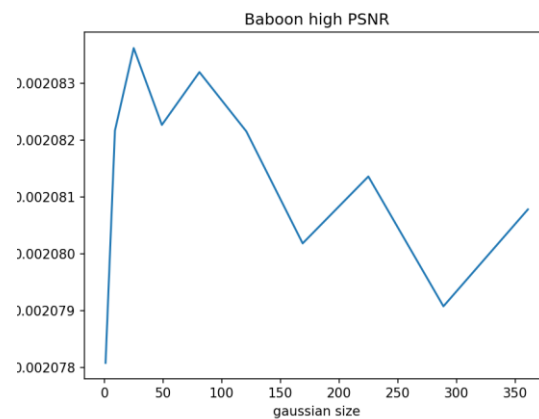
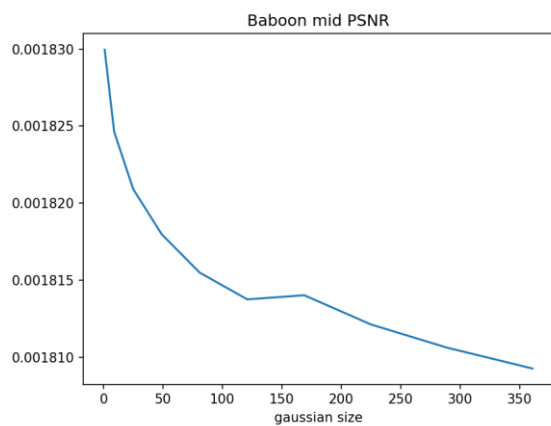
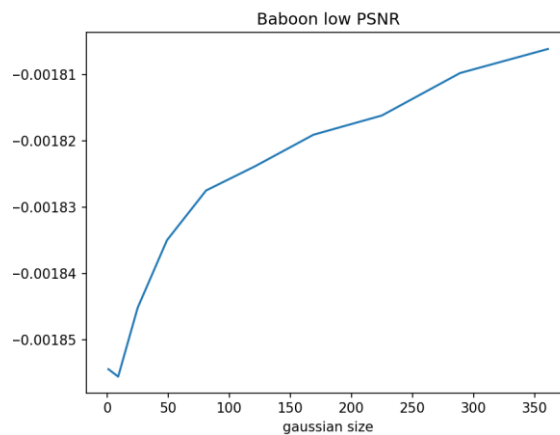
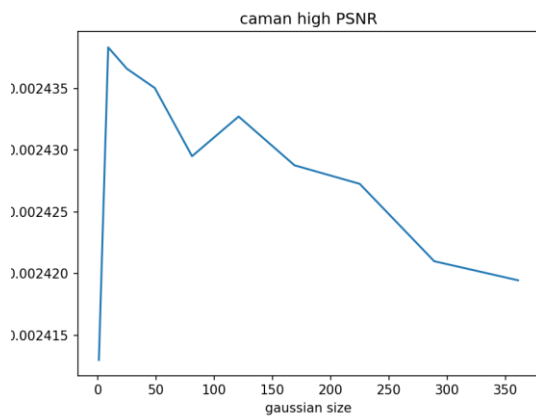
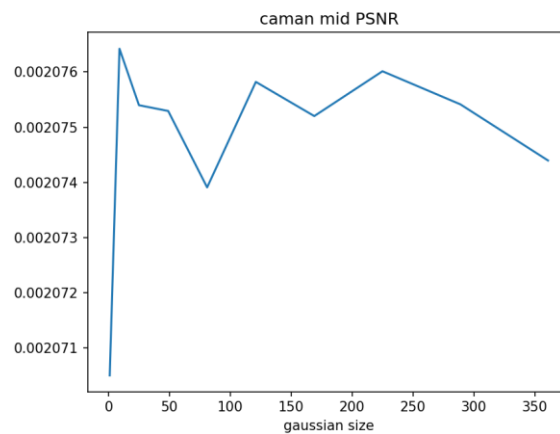
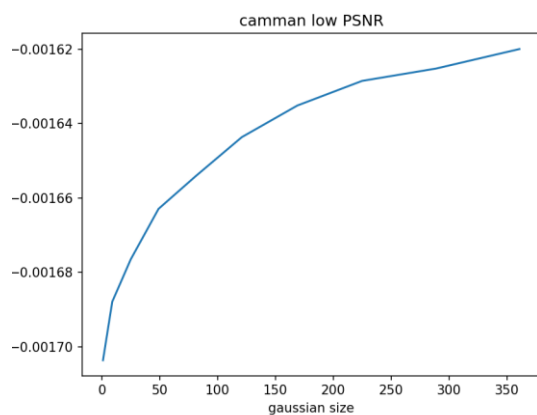
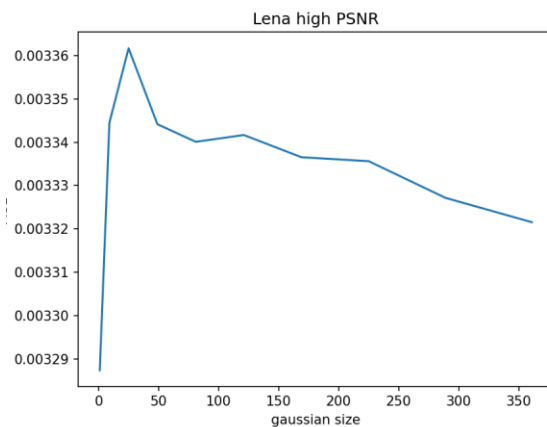
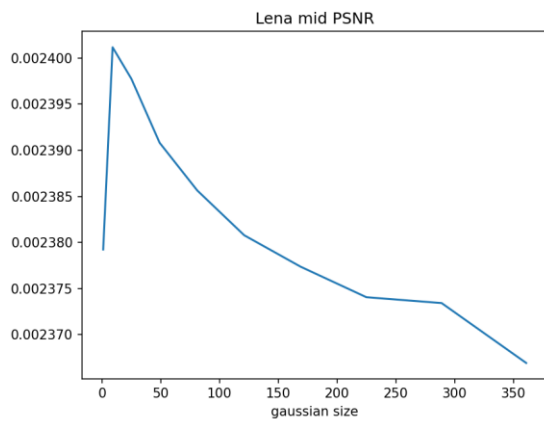


2:

For this exercise I used Gaussian noise filter in 3 grades of noise from low to high and applying Gaussian filter in 10 grades which resulted in 18 tables with the msp and psnr scores the best setting is the one where the local minimum of the table occurs







The results can vary from picture but the amount of noise plays an important role in choosing the best setting but overall using bigger Gaussian filter with images with higher noises is usually better.