

Assignment 3

Part1

To implement medium filtering operation, i have used a temporary window to store all of the pixels in the current iteration of the convolution operation. In this step, basically, i have implemented operations with nested loops and i took the medium element in the temporary window and assigned it to the result array.

In this part of the assignment, you are required to enter not only the name of the image, but also the size of the filter. As we can see above, there is a trade off when we choose the size of the filter. Bigger filters are better to remove noises however, if we use bigger filter sizes, the clearness of the picture is disappearing as we expected.

Name of the image: >> Cameraman1.bmp

Please enter size of the filter: 3

Cameraman1.bmp



FilterSize: 3



Cameraman1.bmp



FilterSize: 5



Cameraman1.bmp



FilterSize: 7



Cameraman2.bmp



FilterSize: 3



Cameraman2.bmp



FilterSize: 5



Cameraman2.bmp



FilterSize: 7



Cameraman3.bmp



FilterSize: 3



Cameraman3.bmp



FilterSize: 5



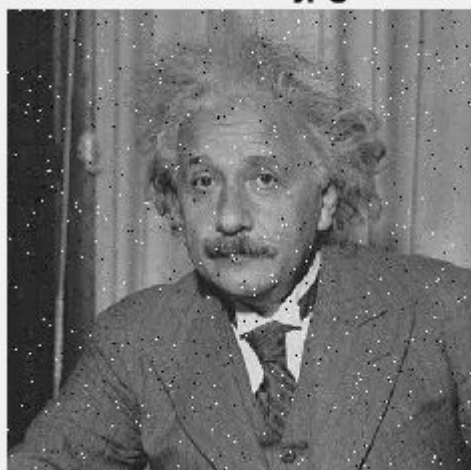
Cameraman3.bmp



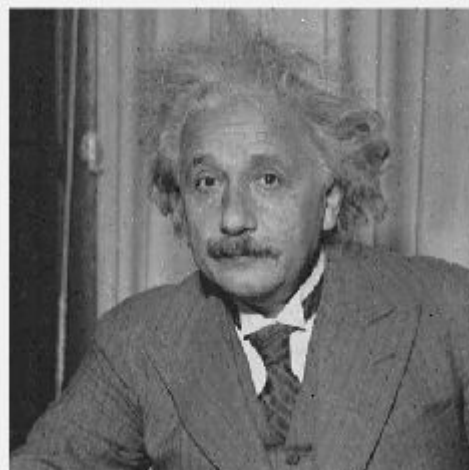
FilterSize: 7



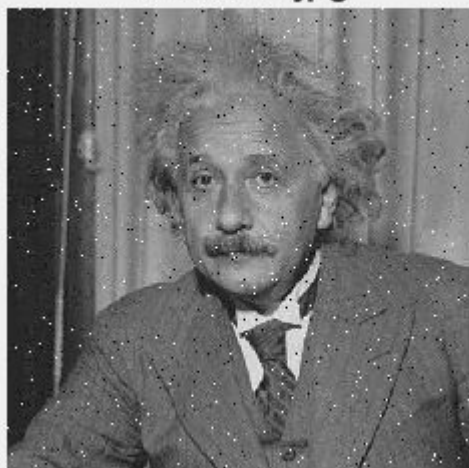
einstein1.jpg



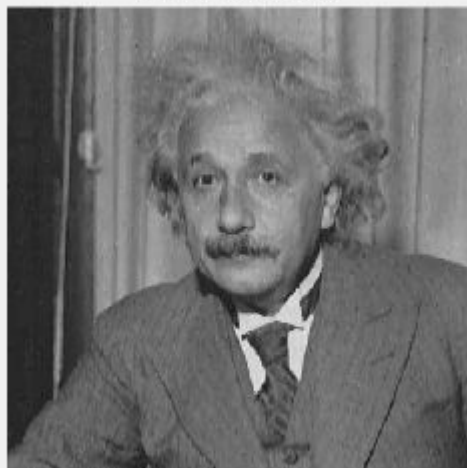
FilterSize: 3



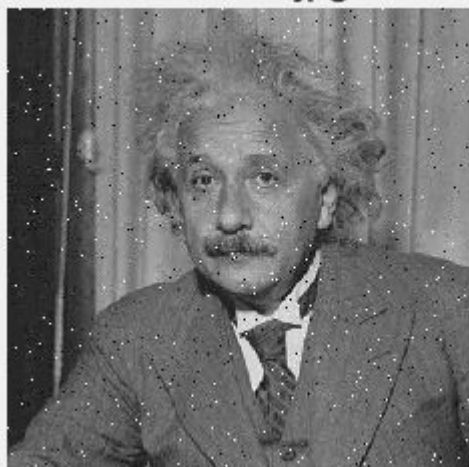
einstein1.jpg



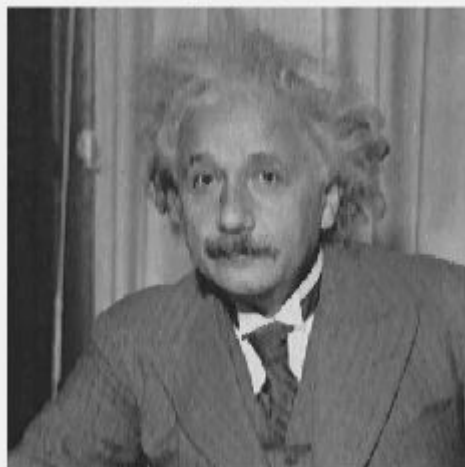
FilterSize: 5



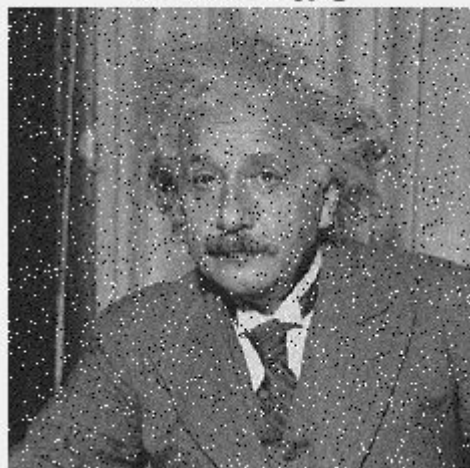
einstein1.jpg



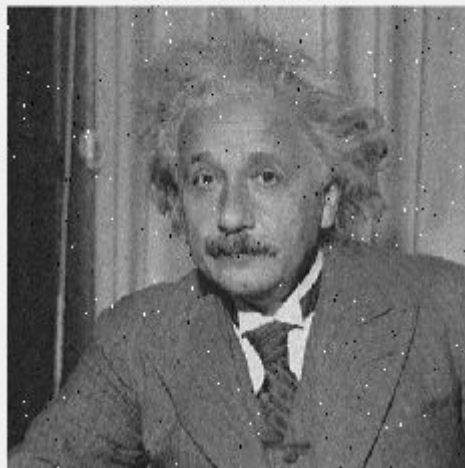
FilterSize: 7



einstein2.jpg



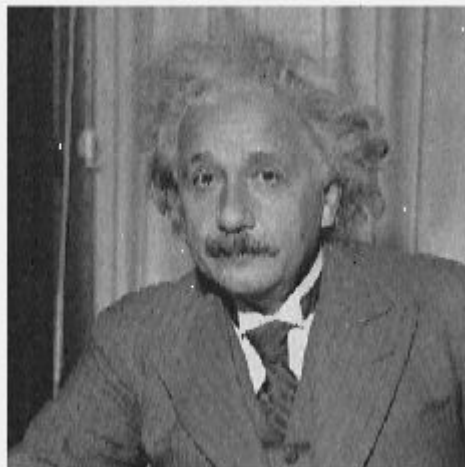
FilterSize: 3



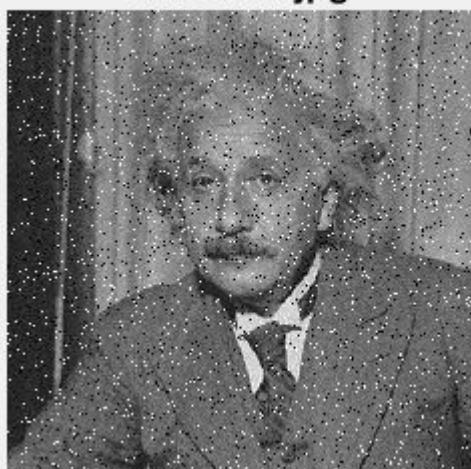
einstein2.jpg



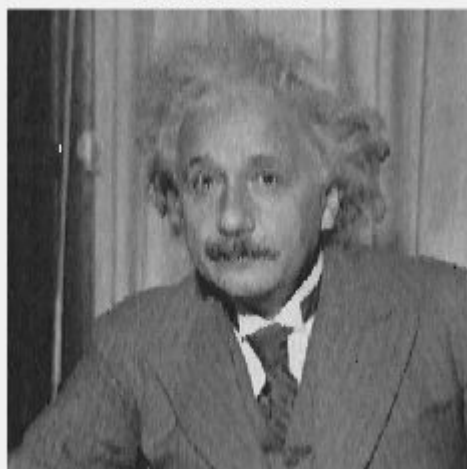
FilterSize: 5



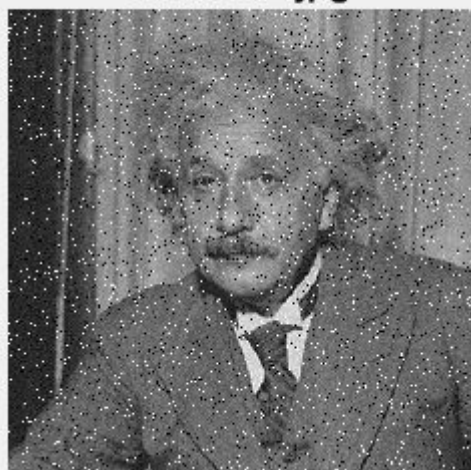
einstein2.jpg



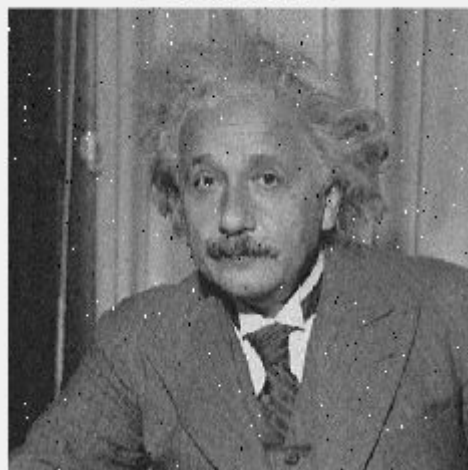
FilterSize: 7



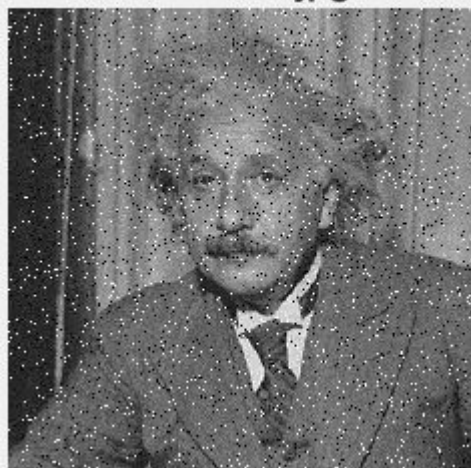
einstein2.jpg



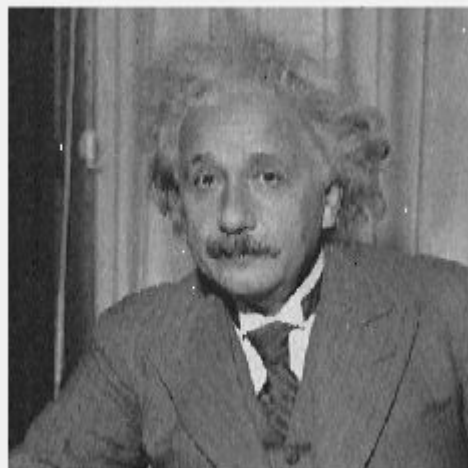
FilterSize: 3



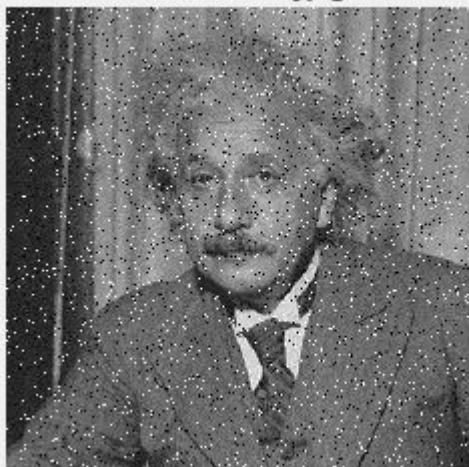
einstein2.jpg



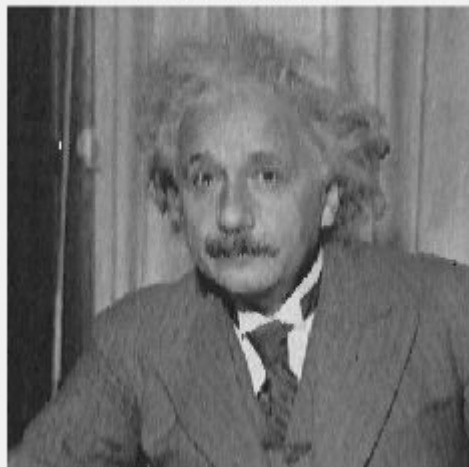
FilterSize: 5



einstein2.jpg



FilterSize: 7



Lena1.bmp



FilterSize: 3



Lena1.bmp



FilterSize: 5



Lena1.bmp



FilterSize: 7



Lena2.bmp



FilterSize: 3



Lena2.bmp



FilterSize: 5



Lena2.bmp



FilterSize: 7



Lena3.bmp



FilterSize: 3

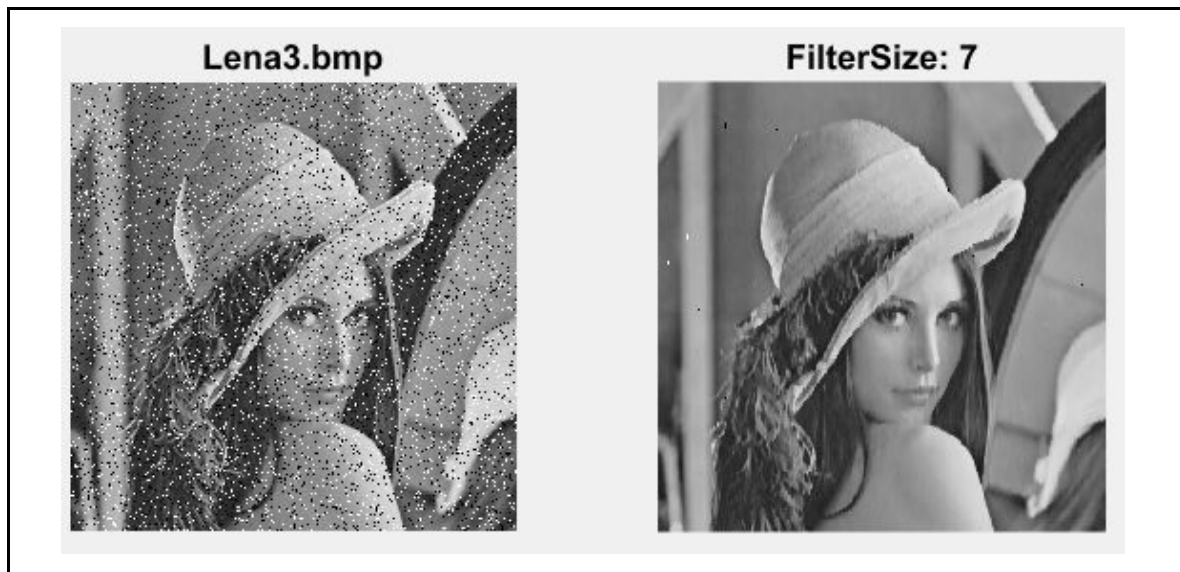


Lena3.bmp



FilterSize: 5





Part2

Name of the image: >> zebra2.jpg

