

Implement a Gaussian filter of size 3x3 and 5x5. Also implement a median filter of the same size. Apply it on the 'ruler' image sent for the assignment. 4

The images need to be embedded in the following table (remove the [...]) and embed the corresponding image).

	Kernel Size 3x3	Kernel Size 5x5
Mean Filter	[Image to be input here]	[Image to be input here]
Median Filter	[Image to be input here]	[Image to be input here]

Which of these two filters preserve the edges better and why?

Sharpen the 'tank' image using first and second order techniques. Embed the resulting images in the following table. 6

In place [technique#] write the name of the operator and size of mask.

First Order		Order	
[Technique 1]	[Image to be input here]	[Technique 1]	[Image to be input here]
[Technique 2]	[Image to be input here]	[Technique 2]	[Image to be input here]
[Technique 3]	[Image to be input here]	[Technique 3]	[Image to be input here]

Add more rows to the table if needed

This question is kept purposefully open ended. Not all the techniques have been discussed in class. Marks will be assigned based on ranking. Students with the best results will be given the highest marks (out of 2). The rest (4 marks) will be based on your effort, i.e. higher the effort higher will be the marks.

Submit a report and your code in Google Classroom.