

Read the instructions carefully.

- 1. The following problem is of 10 marks.**
- 2. You will have to upload the solution to the assignment on Moodle. No assignment will be accepted on mail.**
- 3. Do not copy the solution from others or from internet. If your assignment is found to be copied, no excuses would be entertained and you will be simply awarded zero.**
- 4. Even if your program is not executing, then too you will get some marks. But copied solution would be awarded zero.**
- 5. Do not try to share your solution with others. If the solutions are found to be copied, no investigation would be done as who has copied from whom. Both will be awarded zero and no excuses will be entertained.**
- 6. It is expected that all of you should upload your assignment before the time expires. I repeat, no assignment will be accepted on mail.**
- 7. You are free to use any programming language to write your code.**
- 8. You can submit the assignment on Moodle till 27th June, before 11.55 PM.**

Download five medical images (X-ray/MRI images). Denoise the image using Gaussian filter. Apply local thresholding technique to perform segmentation. Apply Laplacian pyramid on the segmented image and decompose image up to two levels. Apply canny edge detection algorithm to obtain edges of segmented image. Compare which of the two levels gives better results. For the level that gives better result, compute Geometric moments of that image. Take sequence of moments from 0 to 4.