

1. Write your Python code to perform **global** and **local thresholding** on a given image (fig 1), along with a report discussing the impact of different threshold values on the segmentation results.



Fig 1

2. Write a Python code for performing segmentation using K-means clustering on a given image (fig 1).
3. Write a Python code for detecting edges by using a canny edge detection algorithm on a given image (fig 2).



Fig 2