Benha University
Faculty of Engineering - Shoubra
Surveying Engineering Department
MSc Preliminary Studies



Year: 2021/2022 Semester: First

Digital Image Processing

Assignment No.: 5

Q1. Develop a code to detect isolated points in an image using a relevant mask

Q2. Develop a code to extract lines of one pixel thick and oriented at 45° in an image

Q3. Write related statements to detect edges in an image using "sobel" operator, explaining the parameters of related function

Q4. Describe the function "houghpixels". Explain its parameters and its outcome.

Q5. Describe the function "houghlines". Explain its parameters and its outcome.

Q6. Clarify the concept of region growing. Show how this process can be implemented in MATLAB environment.

Q7. Explain the concept of region splitting and merging. Show how this procedure can be implemented in MATLAB environment.