Universiti Malaysia PAHANG Crearry - Universiti	COURSE: IMAGE PROCESSING			MARKS:	
	TOPIC: Image Segmentation		CODE: BCM2063	/10	/10
	Lab Exercise	NO: 5	DURATION: 90 minutes		

QUESTION 1

[5 Marks]

Instruction:

- (a) Open "Lena.tiff", read the file into *f*.
- (b) Write a new function to detect image edge using Sobel approximation to the derivatives (without build-in-function).
- (c) Write a new function to detect image edge using Prewit approximation to the derivatives (without build-in-function).
- (d) Display the two image edges obtained from Sobel and Prewit techniques for comparison.
- (e) Inspect and analyse the results in terms of edge image.

QUESTION 2

Instruction:

(a) Open "Text image" as shown in Figure 1, read the file into f.

ponents or broken connection paths. There is no poir tion past the level of detail required to identify those Segmentation of nontrivial images is one of the mos processing. Segmentation accuracy determines the ev of computerized analysis procedures. For this reason, c be taken to improve the probability of rugged segments such as industrial inspection applications, at least some the environment is possible at times. The experienced i designer invariably pays considerable attention to sucl

Figure 1. Text image.

- (b) Split text and background image using global threshold.
- (c) Display and analyse the results obtained from global threshold technique.

[5 Marks]