NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

School of Science

Information Technologies in Medicine and Biology

Direction: *Bioinformatics*

Image Processing and Analysis

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Deadline Date: *19/04/2013*

Assignment 4

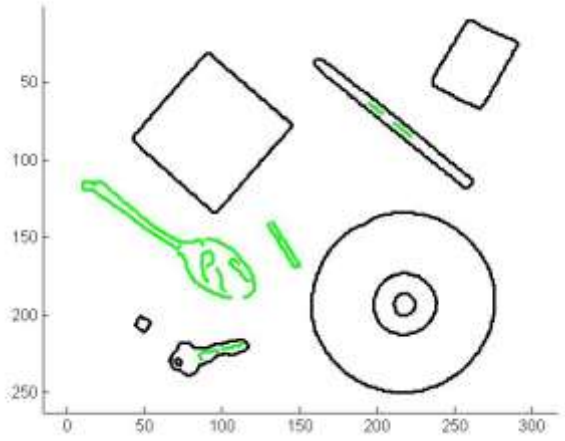
Task 1

In the first task of our assignment we were asked to execute the current implementation given in class notes of edgelinking (mainprogram.m) and fill in the program implementation in a way that:

1. it should find from the list of line segments the closed lines and draw them with a black color and the open lines and draw them with a green color.
2. it should compute the floor area ***E*** and the perimeter ***Π*** of the shapes that are relevant with the closed lines and using the Π^2/E it separates the lines in three classes. Those that are perimeters of circles in class A, those that are perimeters of squares in class B and all of the perimeters of other shapes in class C. Then, the program should draw each class with a different color.

Given the above additions our implementation results are collocated below:

1.



2.