Name: **Id#**

ICS 103, Term 132

Computer Programming in C

Quiz# 3

Date: Sunday, April 20, 2014

Q1. Write a function that receives the Cartesian coordinates of two points (x1,y1) and (x2,y2) and computes and returns their distance and midpoint computed by the following formula:

$$\text{distance} = \sqrt{(x2 - x1)^2 + (y2 - y1)^2}$$

$$(xm, ym) = (\frac{x1 + x2}{2}, \frac{y1 + y2}{2})$$

Assume that the input and output arguments are of type double.

Q2. Write a program that reads scores of students from a file named "scores.txt" and prints in an output file named, "results.txt" the following:

- Number of Students
- Average score
- Highest score
- Lowest score

The number of scores is not stored in the files "scores.txt". Your program should check whether the input file opened successfully or not. Assume that scores are out of 100 and that scores are of type double.