Assignment 3

Q1. Copy the Point2D class , along with the package from previous assignment.

a) Create a class "TestPointArray1.java" in "tester" package for the following

b) Accept , how many no of points to plot from user.

c) Create suitable data structure

Hint : Point2D[] points=new Point2D[sc.nextInt()];

d) Prompt user for x & y co ordinates n store the data suitably

Hint : for loop

e) Supply Menu to user with various Options like following

1. Display details of a specific point

User i/p : index

O/p : x & y co-ordinates should be displayed. or error message(eg : Invalid index , pls retry!!!!)

2) Display x, y co-ordinates of all points

Hint : for-each

3) User i/p : 2 indices for the points , validate the indices

Display distance between specified points (iff they are not located at the same position)

eg : sop("Enter index of strt point n end point");

validation : boundary condition (0<=index<length-1)

isEqual -- false --compute distance --display it.

4. Exit

Q2. Create an application that calculates your daily driving cost, so that you can estimate how much money could be saved by car pooling, which also has other advantages such as reducing carbon emissions and reducing traffic congestion. The application should input the following information and display the user's cost per day of driving to work:

a) Total miles driven per day.

b) Cost per gallon of gasoline.

c) Average miles per gallon.

d) Parking fees per day.

e) Tolls per day.