

Lab Work #6

29/04/2008

Task 1. Point Class

Design and implement a class called `Point` that contains instance data that represents x , y coordinates. Implement the method `computeDistanceTo(Point p2)`; that computes the euclidian distance between these two points. Overload the equals and toString methods of your class.

Test your class by a main method which first asks the user how many points the user will input and gets the x and y coordinates of these points to fill an array.

Find two points that are closer to each other than any other pair of points.

Task 2. CourseGrade class

Write a `CourseGrade` class which stores the midterm, final, lab and homework grades. Implement a method that calculates the cumulative grade for the course by assuming that Final is 35%, Midterm is 30%, Labs are 25% and homeworks are 10%. Another method that calculates the Letter Grade for the course.

Test your class with a Main method that takes in a number of Grades from input (fill an array) and prints out an excel like table of 5 columns consisting of each 4 grades and the cumulative grade. In the last row of each column print out the average for that column.