**Lab 1 – 10 Points**

1. **Programming Exercise 2.15 (page 71)**

Write a program that prompts the user to enter two points (x1,y1) and (x2,y2) and displays their distance between them. The formula is given in the book. Note, that you can use the Math.Pow function to do the square root calculation.

Enter x1 and y1: 10.0 10.0

Enter x2 and y2: 5.0 7.0

The distance of the two points is 5.830951894845301

Enter x1 and y1: 10.5 7.5

Enter x2 and y2: -2.2 -5.7

The distance of the two points is 18.317477992343814

1. **String Manipulation**

Write a program that will read a line of text as input and then display the line with the first word moved to the end of the line. For example, a possible sample interaction with the user might be

Enter a line of text. No punctuation please.

Java is the language

I have rephrased that line to read:

Is the language Java

Assume that there is no space before the first word and that the end of the first word is indicated by a blank, not by a comma or other punctuation. Note that the new first word must begin with a capital letter.

Note, you cannot use the split function to manipulate the sentence and you cannot load each word into an array.