LAB ASSIGNMENTS

PYTHON PROGRAMMING LAB

MCA 1st Year 1st Semester, 2022

Subject Code: MCAP1112

Day 5

1. Write a script that reads lines from a file, adds line numbers to them, and then stores the numbered lines into a new file. The name of the input file and also the new file will be read from the user. Each line in the output file should begin with the line number, followed by a colon and a space, followed by the line from the input file.

2. Write a script that identifies the longest word(s) in a file and output a message that includes the length of the longest word, along with all of the words of that length that occurred in the file.

3. Create a script that removes all of the comments from a Python source file and save the modified file with a new name.

4. Create a class to represent a point in two-dimensional geometric coordinates. Initialize the position of a new point. In the initializer, the x and y coordinates can be specified. If they are not, the point defaults to the origin. Write methods to i) move the point to a new location in 2D space, ii) reset a point back to the geometric origin (0, 0), iii) calculate the Euclidean distance from a point to a second point passed as an argument. Instantiate objects of the point class and test the methods on the created objects.