

## Assignment – Day 12

1. Join two sorted lists such that the final list is also sorted

**[Marks: 2]**

Refer the files ***sonnet\_words.txt*** & ***sowpods.txt*** file to answer the following questions

2. Use the two files shared to solve following problems:

- a. Print the longest palindrome in sowpods.txt

**[Marks: 3]**

- b. Print the words that are in sonnet\_words.txt but not in sowpods.txt

**[Marks: 5]**

3. Implement the circle problem using object oriented approach:

- a. Create a circle class

- b. Take center coordinates and radius as attributes

- c. Define all related functions within the class like

- i. Area
- ii. Perimeter
- iii. Center distance from origin
- iv. Circumference distance from origin

- d. Handle any exceptions and Not valid scenarios

**[Marks: 7]**