1MCA-B PYTHON Programming

26-07-2023(Wednesday 09-11AM)

Regular lab Questions - Q1

Q1: Demonstrate use of Python data structures.

1. STR

a. Write a paragraph on your identified domain. Write a python program
   - to find the frequency of the given word(your domain name) in the paragraph.
   - to compute the number of characters, words and lines in the paragraph
   - to arrange the letters of the given word(your domain name) in alphabetical order

b. Write a python program to encrypt a given string(your domain name) using the following method:
   Encrypt Method: Add a number 'n'(given by the user) to each alphabet in the given string to create the corresponding letter.
   Example:
   Input: bat
   Encrypt Method:value of n = 3
   Output:edw.

2. Functions

Implement a function pay() that takes as input two arguments: an hourly wage and the number of hours an employee worked last week. Your function should compute and return the employee's pay. Any hours worked beyond 40 is overtime and should be paid 1.5 times the regular hourly wage.

```
>>> pay(10,35)
350
>>>pay(10,45)
475.0
```

3. Tuple

Create a list of tuples that consists of two neumatic and one string
For example houses for rent, the number of bedrooms and their prices, like so:
[('main st.', 4, 4000), ('elm st.', 1, 1200), ('pine st.', 2, 1600)]
Sort the list in the following ways:

a. In ascending order by first numeric value

b. In descending order by second numeric value
c. In alphabetical order of string value