

2023

COMPUTER SCIENCE — HONOURS — PRACTICAL

Paper : DSE-B-2P

(Programming in Python Lab)

Full Marks : 30

Set - II

Marks Distribution

Source Code	:	15
Output	:	05
Sesional	:	04
Viva voce	:	06
		<hr/>
		30

Answer *any one* question.

1. Write a Python program to create a list (taking values from the user) and count the occurrence of each element and then create a dictionary to show the count of each element.

For example :

Input :

```
sample_list = [11, 45, 8, 11, 23, 45, 23, 45, 89]
```

Output :

```
{11 : 2, 45 : 3, 8 : 1, 23 : 2, 89 : 1}
```

2. Write a Python program to create a class representing a queue data structure. Then create methods for the following operations :
 - (a) enqueue()
 - (b) dequeue()
 - (c) Is_empty()

3. Write a Python program to take a multi word string from user. Then perform the following operations :

(a) Count the occurrences of a given word in the given string sentence.

For example :

Enter string : orange is orange in colour

Enter word : orange

Count of the word is : 2

(b) Form a string where the first character and the last character have been exchanged.

For example :

Enter string : hello world

Modified string : dello worth

4. Write a program in Python to implement a function that reverse elements of a nested-list recursively.

As for an example-

([[1, 2], [3, [4, 5]], 6]).

Corresponding output should be - [6, [[5, 4], 3], [2, 1]].

5. Write a program in Python that checks whether any word in a given string starts and ends with a vowel. Return true if a word matches the condition; otherwise, return false.

Sample Data :

("Red Orange White") → True

("Red White Black") → False

("abcd dkise eosksu") → True