

DWIT 013

Introduction to Python Programming

Assignment II

Deadline: November 21, 2018, 05:00 pm

1. Write a program to print all prime numbers between 1 and 100.
2. Write a Python program to get a string made of the first 2 and the last 2 chars from a given a string. If the string length is less than 2, return "Empty String".

Sample String : 'HelloworLD'

Expected Result : 'HeLD'

Sample String : 'a3'

Expected Result : 'a3a3'

Sample String : 'w'

Expected Result : 'Empty String'

3. Write a Python program to get a single string from two given strings, separated by a space and swap the first two characters of each string.

Sample String : 'abc', 'xyz'

Expected Result : 'xyc abz'

4. Write a Python program to multiply each item in a list by an integer.
5. Write a Python program to count the number of strings where the string length is 2 or more and the first and last character are same from a given list of strings.

Sample List : ['abc', 'xyz', 'aba', '1221']

Expected Result : 2

6. Write a Python program to print a specified list after removing the 0th, 4th and 5th elements.

Sample List : ['Red', 'Green', 'White', 'Black', 'Pink', 'Yellow']

Expected Output : ['Green', 'White', 'Black']

7. Write a Python program to insert a given string at the beginning of all items in a list.

Sample list : [1,2,3,4], string : emp

Expected output : ['emp1', 'emp2', 'emp3', 'emp4']

8. Write a Python program to remove duplicates from a list.
9. Write a Python program to combine two dictionary adding values for common keys.

```
d1 = {'a': 100, 'b': 200, 'c':300}
```

```
d2 = {'a': 300, 'b': 200, 'd':400}
```

Sample output: Counter({'a': 400, 'b': 400, 'd': 400, 'c': 300})

10. Write a Python script to concatenate dictionaries and create a new one.

Sample Dictionary :

```
dic1 = {1:10, 2:20}
```

```
dic2 = {3:30, 4:40}
```

```
dic3 = {5:50, 6:60}
```

Expected Result : {1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}

11. Write a Python program to replace last value of tuples in a list.

Sample list: [(10, 20, 40), (40, 50, 60), (70, 80, 90)]

Expected Output: [(10, 20, 100), (40, 50, 100), (70, 80, 100)]

12. Write a Python program to remove an empty tuple(s) from a list of tuples.

Sample data: [(), (), ('), ('a', 'b'), ('a', 'b', 'c'), ('d')]

Expected output: [('), ('a', 'b'), ('a', 'b', 'c'), 'd']

BONUS:

1. Write a Python script to sort (ascending and descending) a dictionary by value.
2. Write a Python program to count the occurrences of each word in a given sentence