

Python

1. WAP to input 10 numbers repeatedly (using range based for loop) and store them in a list
2. Update the above program to print the sum of numbers.
3. WAP to input numbers from user till the user wishes to exit and print total sum at the end.
Your Programs output should look something like this:

```
Enter a Number : 4
Enter More (y/n): y
Enter a Number : 20
Enter More (y/n): y
Enter a Number : -5
Enter More (y/n): n
Total Sum = 19
```

4. WAP to print total number of spaces in a string (Use for loop to iterate over the string).
5. WAP to print total number of vowels in a string (Vowels are 'a','e','l','o','u').
6. WAP to input a string and count occurrence of each vowel in a string.

Ex: if user enters:

“Beautiful Day”

Output should Be:

```
a:2
e:1
l:1
o:0
u:2
```

[Hint: Use a list of a dictionary (preferably dictionary)]

7. Update the previous program to print the count of not just vowels, but every symbol present in the string separately (including spaces, punctuators...).
8. Find the output of the following code snippets.

```
for i1 in range(1,6):
    for i2 in range(5):
        print('*', end = '')
    print()
```

```
for i1 in range(1,6):
    for i2 in range(i1 + 1):
        print('*', end = '')
    print()
```

```
for i1 in range(1,6):
    print('*'*i1)
```

```
for i1 in range(1,6):
    for i2 in range(i1):
        print(i1, end = '')
    print()
```

```
for i1 in range(1,6):
    print(str(i1)*i1)
```

9. WAP to input a string and replace all vowels with '_'.
[Hint: Convert string to list. Remember!! Strings are immutable. Replace in the list and then join]

10. Predict the output of following code

```
import random
nums = [10, 20, 2, 5, 11]
for counter1 in range(len(nums)):
    for counter2 in range(len(nums) - counter1 - 1):
        if nums[counter2] > nums[counter2 + 1]:
            nums[counter2], nums[counter2 + 1] = nums[counter2 + 1], nums[counter2]
print(nums)
```

11. WAP to generate a list of 10 random numbers and print it on screen.

12. Create a list **words**, which contains any 10 words of your choice. Each time the program runs, print one random word from the list.

13. Find output of:

```
for num in range(10):
    print("Num : ", num)
    if num % 4 == 0:
        break
print("Loop Ends")
```

```
import sys
for num in range(10):
    print("Num : ", num)
    if num % 4 == 0:
        sys.exit()
print("Loop Ends")
```