

## Cycle 1.2

### Programs :

Aim : Count the occurrences of each word in a line of text.

### Algorithm

#### Steps

1. Start
2. define function word\_count() with str parameter.
  - 2.1. declare a dictionary
  - 2.2. split elements and store as list
  - 2.3. in for loop, if each element in list appears in dict, increment element, else, set the count as 1
3. call the function
4. stop

### Program

```
def word_count(str):  
    words = str.split()  
    counts = dict()  
    for word in words:  
        if word in counts:  
            counts[word] = counts[word] + 1  
        else:  
            counts[word] = 1  
    return counts
```

```
string = input("Enter the string:")
print(word_count(string))
```

:24000000 To reduce the value

or expected value without

↑ & register self value

00 : register self value

121 : register self value

[, 121, 00]

Output

{'happy': 2, 'be': 1}

## Program 12

AIM: Prompt the user for a list of integers. For all values greater than 100, store 'over' instead.

### Algorithm

#### Steps

1. Start
2. Declase a list
3. Read the number of elements
4. In for loop
  - 4.1 Read the integers
  - 4.2 If integer greater than 100,  
store 'over'
  - 4.3 else, store the integer.
5. Print the list
6. Stop

### Program

```
list = []
n = int(input('Enter the number of  
elements: '))
for i in range(0, n):
    v = int(input('Enter the integer: '))
    if (v > 100):
```

list.append('over')

else:

list.append(v)

print(list)

Output

Enter the number of elements: 4

Enter the integer: 12

Enter the integer: 84

Enter the integer: 100

Enter the integer: 125

[12, 84, 100, 'over']

## Program : 3

Aim: Store a list of First name.

Count the occurrence of 'a' within the list

### Algorithm

#### Steps

1. Start
2. Store a list of first names
3. In for loop, take each element in list
  - 3.1 In another for loop, take each element in the current element
    - \* 3.1.2 If element is 'a' increment count by 1
4. Print count
5. Stop.

### Program

```
list = ['athulya', 'danya', 'arthiva']
```

```
count = 0
```

```
for i in list:
```

```
    for j in i:
```

```
        if (j == 'a')
```

```
            count = count + 1
```

```
Print ("number of 'a' is: ", count)
```

Output

The number of 'a' is 7

## Program: 4

Aim: Enter 2 list of integers. check.

- (a) whether list are of same length
- (b) whether list sums to same value.
- (c) whether any value occurs in both lists

### Algorithm

#### Steps

1. Start
2. Create a list1
3. Create list2
4. If lengths of list1 equal to length of list2. Then print lengths are same.
5. else.  
Print lengths are not same.
6. If sum of list equals to sum of list2  
then print sum are same.
7. else  
Print sum are not same
8. If any value in list2 present in list1, then n becomes true.
9. If n is true  
Print common value occurs in both list
10. else, Print no common value
11. STOP

## Program

```
list1 = [5, 9, 8, 6]
list2 = [3, 2, 9, 4]
if (len(list1) == len(list2)):
    print("length of list1 and list2 are same")
else:
    print("length of list1 and list2 are not same")
if (sum(list1) == sum(list2)):
    print("sum of list1 and list2 are same")
else:
    print("sum of list1 and list2 are not same")
n = any([value in list2 for value in list1])
if (n == True):
    print('common value occur in both list',
          end = " ")
    print(set(list2).intersection(set(list1)))
else:
    print("No common value occur")
```

## Output

length of list 1 and list 2 are same.

Sum of list 1 and list 2 are not same.

Common value occur in both list

{9}

## Program : 5

Aim: Get a String from an input string where all occurrences of first character replaced with '\$', except first character [eg: onios → oni \$n]

### Algorithms

1. Start
2. define a function string replace.
  - 2.1 Store First variable.
  - 2.2 Replace the First character which comes forward in string with '\$' and store .
  - 2.3. print Firstcharacter + SecondString
3. Read String
4. call replace function
5. Stop

## Program

```
def string replace (str)
    first char = str [0]
    str1 = str [1:] . replace (first char, " ")
    print (first char + str1)
str = input ('enter a string : ')
string replace (str)
```

## Output

Enter a string : onion

oni\$0.:((s+e)n) - (1+21) oni

and 6 left from 1 left for digest) nothing

("s+e)n

and 6 left from 1 left for digest) nothing

("s+e)n

oni\$0.:((s+e)n) - (1+21) oni

and 6 left from 1 left for digest) nothing

and 6 left from 1 left for digest) nothing

and 6 left from 1 left for digest) nothing

(s+e)n

and 6 left from 1 left for digest) nothing

("s+e)n

and 6 left from 1 left for digest) nothing

and 6 left from 1 left for digest) nothing