In [16]:
```
#Write a Python function to find the maximum of from given
def max_number(num):
    for i in num:
        return max(num)
num=[42,35,78,17,35,97,36,0,25]
max_number(num)
```

Out[16]:
```
97
```

In [26]:
```
#Write a Python function to sum all the numbers in a list. Sample List : [8, 2, 3, 0,
def add_list(a):
    b=0
    for i in range(len(a)):
        b=b+a[i]
    print(b)
a=[8,2,3,0,7]
add_list(a)
```

```
20
```

In [34]:
```
# Write a Python function that takes a list and returns a new list with distinct eleme
#Sample List : [1,2,3,3,3,3,4,5] Unique List : [1, 2, 3, 4, 5]
def get_unique_elements(input_list):
    unique_list = []
    for item in input_list:
        if item not in unique_list:
            unique_list.append(item)
    return unique_list

sample_list = [1, 2, 3, 3, 3, 3, 4, 5]
unique_list = get_unique_elements(sample_list)
print(unique_list)
```

```
[1, 2, 3, 4, 5]
```

In [23]:
```
#Write a Python function total number of Combinations
from itertools import combinations as c

def combo(a,n):
    a=c(a,n)
    for i in a:
        print(i)
s="Sumit"
combo(s,3)
```

```
('S', 'u', 'm')
('S', 'u', 'i')
('S', 'u', 't')
('S', 'm', 'i')
('S', 'm', 't')
('S', 'i', 't')
('u', 'm', 'i')
('u', 'm', 't')
('u', 'i', 't')
('m', 'i', 't')
```

In [25]:
```
#Write a Python function total number of permutation
from itertools import permutations as p
```

```
def per(val):
    b=p(val)
    for i in b:
        print(i)
val=(6,5,4)
per(val)
```

```
(6, 5, 4)
(6, 4, 5)
(5, 6, 4)
(5, 4, 6)
(4, 6, 5)
(4, 5, 6)
```

In [27]:
```
#Define a function which counts vowels and consonant in a word.
def vowel_count(n):
    count = 0
    count1 = 0
    vowel = set("aeiouAEIOU")
    for alphabet in n:
        if alphabet in vowel:
            count = count + 1
        elif alphabet not in vowel:
            count1=count1+1

    print("count of vowels :", count)
    print("count of consonant :", count1)
n=input("enter what you want : ")
vowel_count(n)
```

```
enter what you want : sumit
count of vowels : 2
count of consonant : 3
```

In [28]:
```
#Define a function that accepts lowercase words and returns uppercase words.
def upper_case(a):
    print(a.upper())
a=input("enter what you want : ")
upper_case(a)
```

```
enter what you want : sumit
SUMIT
```

In [31]:
```
# count lower case and upper case letter.
def count_letters(a):
  count = 0
  count1 = 0
  for letter in a:
    if letter.islower():
       count += 1
    elif letter.isupper():
      count1 += 1
  return count,count1


a=input("enter what you want : ")
x,y=count_letters(a)
print("upper case latter in your typing is : ",y)
print("lower case latter in your typing is : ",x)
```

```
enter what you want : SuMiT
upper case latter in your typing is :  3
lower case latter in your typing is :  2
```

In [ ]:

In [ ]: