

In []:

```
#wapp that prints all the numbers from 0 to 6 except 3 and 6
```

In [6]:

```
for x in range(6):
    if (x==3 or x==6):
        continue
    print(x,end=' ')
print()
```

0 1 2 4 5

In [2]:

```
a = 0
while a in range(0,6):
    if a%3!=0:
        print(a,end=" ")
    a+=1
```

1 2 4 5

In []:

In []:

```
# Write a program to accept a number from a user and calculate the sum of all numbers from
```

In [8]:

```
no=int(input("enter the number_"))
totl=0
for i in range(1,no+1):
    totl+=i
print("sum is",totl)
```

enter the number_5
sum is 15

In [5]:

```
num = int(input(" Enter the range :"))
a = 0
b = 0
while b<=num:
    print(b,end=" ")
    a += b
    b += 1
print("\n Sum of all numbers :",a)
```

```
Enter the range :5
0 1 2 3 4 5
Sum of all numbers : 15
```

In []:

```
# Write a program to print multiplication table of a given number(input)
```

In [10]:

```
num=int(input('enter the number'))
for i in range(1,11):
    mul=num*i
    print(num,"x",i,"=",mul)
```

```
enter the number5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```

In [8]:

```
num=int(input("enter a number :"))
n=1
while n<=10:
    print(num,"x",n,"=",num*n)
    n=n+1
```

```
enter a number :35
35 x 1 = 35
35 x 2 = 70
35 x 3 = 105
35 x 4 = 140
35 x 5 = 175
35 x 6 = 210
35 x 7 = 245
35 x 8 = 280
35 x 9 = 315
35 x 10 = 350
```

In [18]:

```
# Write a program to count the total number of digits in a number using a while loop. For ex
```

In [16]:

```
num=int(input("enter num_"))
count=0
while (num>0):
    num=num//10
    count=count+1
print("digits are",count)
```

```
enter num_000987
digits are 3
```

In [10]:

```
c=input("enter a number: ")
count=0
l=len(c)
for i in range(1,l+1):
    count+=1
print(count)
```

```
enter a number: 305
3
```

In [19]:

```
# Write a Python program to guess a number between 1 to
#Example:
#User is prompted to enter a guess. If the user guesses wrong
#then the prompt appears again until the guess is correct, on
#successful guess, user will get a "Well guessed!" message,
#and the program will exit
```

In [34]:

```
import random
r=random.randrange(1,20)
print(r)
while r!=guess:
    guess=int(input("enter number between 1 to 20_"))
    print("wrogn guess")
    continue
else:
    print("r i g h t   g u e s s")
```

```
5
enter number between 1 to 20_4
wrogn guess
enter number between 1 to 20_14
wrogn guess
enter number between 1 to 20_5
wrogn guess
r i g h t   g u e s s
```

In [16]:

```
import random
r=random.randrange(1,10)
for i in range(1,10):
    guess=int(input("enter the number between 1 to 10 :"))
    if r==guess:
        print("right guessed!")
        break;
    else:
        print("wrong guess")
```

```
enter the number between 1 to 10 :5
wrong guess
enter the number between 1 to 10 :6
wrong guess
enter the number between 1 to 10 :7
wrong guess
enter the number between 1 to 10 :8
right guessed!
```

In []:

```
# Write a Python program which iterates the integers from 1 to 60. For multiples of three
#numbers which are multiples of both three and five print "FizzBuzz".
```

In [35]:

```
a=[]  
for num in range(1,61):  
    if num%3==0:  
        a.append("Fizz")  
    elif num%5==0:  
        a.append("Buzz")  
    elif num%3==0 and num%5==0:  
        a.append("FizzBuzz")  
    else:  
        a.append(num)  
print(a)
```

```
[1, 2, 'Fizz', 4, 'Buzz', 'Fizz', 7, 8, 'Fizz', 'Buzz', 11, 'Fizz', 13, 14,  
'Fizz', 16, 17, 'Fizz', 19, 'Buzz', 'Fizz', 22, 23, 'Fizz', 'Buzz', 26, 'Fiz  
z', 28, 29, 'Fizz', 31, 32, 'Fizz', 34, 'Buzz', 'Fizz', 37, 38, 'Fizz', 'Buz  
z', 41, 'Fizz', 43, 44, 'Fizz', 46, 47, 'Fizz', 49, 'Buzz', 'Fizz', 52, 53,  
'Fizz', 'Buzz', 56, 'Fizz', 58, 59, 'Fizz']
```

In [18]:

```
i=1
while i<=60:
    if i%3==0 and i%5==0:
        print("FizzBuzz")
    elif i%3==0:
        print("Fizz")
    elif i%5==0:
        print("Buzz")
    else:
        print(i)
    i=i+1
```

```
1
2
Fizz
4
Buzz
Fizz
7
8
Fizz
Buzz
11
Fizz
13
14
FizzBuzz
16
17
Fizz
19
Buzz
Fizz
22
23
Fizz
Buzz
26
Fizz
28
29
FizzBuzz
31
32
Fizz
34
Buzz
Fizz
37
38
Fizz
Buzz
41
Fizz
43
44
FizzBuzz
46
```

```
47
Fizz
49
Buzz
Fizz
52
53
Fizz
Buzz
56
Fizz
58
59
FizzBuzz
```

In []:

```
# Write a Python program that accepts a string and calculate
#the number of digits and letters
#Example:
#Input
#Python 3.2
#Output
#Letters 6
#Digits 2
```

In [37]:

```
s1=input("enter the string-")
d=0
a=0
for i in s1:
    if i.isalpha():
        a+=1
    elif i.isdigit():
        d+=1
print("number of alphabets are",a)
print("number of digits are",d)
```

```
enter the string-rang33t
number of alphabets are 5
number of digits are 2
```

In [25]:

```

yourString = input("string with numbers and letters_")
letters = 0
digit = 0
i=0
while i<len(yourString):
    if yourString[i].isdigit():
        digit+=1
    elif yourString[i].isalpha():
        letters+=1
    else:
        continue
    i+=1
print(''Letters are {}
Digits are {}''.format(letters,digit))

```

```

string with numbers and letters_rang33t
Letters are 5
Digits are 2

```

In []:

```

# Write a Python program to check the validity of password input by users.
#Validation:
#At least 1 letter between [a-z] and 1 letter between [A-Z].

#At least 1 number between [0-9].
#At least 1 character from [$#@].
#Minimum length 6 characters.
#Maximum length 16 characters.

```

In [41]:

```

x=input("Enter the Password:")
m=n=o=p=0
z=['$', '#', '@']
y=len(x)
if y>=6 and y<=16:
    for i in x:
        if i.islower():
            m=m+1
        if i.isupper():
            n=n+1
        if i.isdigit():
            o=o+1
        if i in z:
            p=p+1
if m>=1 and n>=1 and o>=1 and p>=1:
    print("Password is Valid")
else:
    print("Password is Invalid")

```

```

Enter the Password:ABCxyz123$@#
Password is Valid

```


In []:

```
# Write a program in Python to reverse a word by using while Loop
```

In [15]:

```
string = 'pro grammer'
i = string
reverse = ''
while(len(i) > 0):
    if(len(i) > 0):
        a = i[-1]
        i = i[:-1]
        reverse += a
print('The reverse string is_', reverse)
```

The reverse string is_ remmarg orp

In [30]:

```
s=input("enter a word: ")
l=len(s)
r=""
for i in range(1,l+1):
    r=r+s[l-i]
print(r)
```

enter a word: pro grammer
remmarg orp

In []:

```
#Wapp which takes 10 integers as input using loop and print their average value on the scre
```



In [36]:

```
print("enter 10 numbers for average_")
a=[]
x=True
while x:
    num=int(input())
    a.append(num)
    if len(a)==10:
        x=False
    else:
        continue
total=sum(a)
print("The average of given numbers is {}".format(total/len(a)))
```

```
enter 10 values to findout their average :
10
20
10
20
10
20
10
20
10
20
The average of given numbers = 15.0
```

In [37]:

```
n=0
for m in range(0,10):
    i=int(input("enter an integer"))
    n+=i
print(n/10)
```

```
enter an integer50
enter an integer100
enter an integer50
enter an integer100
enter an integer50
enter an integer100
enter an integer50
enter an integer100
enter an integer50
enter an integer100
75.0
```

In []:

```
#Wapp which takes integer inputs from user until he/she presses "q" (Ask to press q to quit
```

In [46]:

```

num1=[]
num2=[]
mul=1
add=0
while True:
    num=input("give a number : ")
    if num=="q":
        break
    print("if you want to exit press - q")
    num1.append(num)
for j in num1:
    n=int(j)
    num2.append(n)
for i in num2:
    mul=mul*i
    add=add+i
avg=add/len(num2)
print("\nProduct = {}".format(mul))
print("Average = {}".format(avg))

```

```

give a number : 5
if you want to exit press - q
give a number : 10
if you want to exit press - q
give a number : 5
if you want to exit press - q
give a number : 10
if you want to exit press - q
give a number : q

```

```

Product = 2500
Average = 7.5

```

In []:

```

#Wapp which will remove all digits or any other characters from the string except alphabets
#Example:
#Input:
#"asd12.asd22"
#Output:
#'asdasd'

```

In [47]:

```

a=input("enter the string: ")
s=""
for c in a:
    if c.isalpha():
        s+=c
print(s)

```

```

enter the string: r@ng33t
rngt

```

In [50]:

```
a=input("enter the string: ")
s=""
i=0
while i<len(a):
    if a[i].isalpha():
        s=s+a[i]
    i+=1
print(s)
```

enter the string: r@ng33t
rngt

In []:

```
#Wapp to find the sum of all even numbers from 0 to 10
```

In [56]:

```
a=0
for i in range(0,10):
    if i%2==0:
        a+=i
print(a)
```

20

In [*]:

```
s=0
i=0
while s<=10:
    s=s+1
    if s%2==0:
        i=i+s
print(i)
```

In [57]:

```
sum(filter(lambda x: x%2,range(0,11)))
```

Out[57]:

25

In []:

```
#Wapp which will accept a digit and printAll the numbers before it till 0  
#Example:  
#Input:  
#5  
#Output:  
#4  
#3  
#2  
#1  
#0
```

In []:

```
# Create a dynamic calculator which will run continually till you press "c"
```