In [32]:
```
#1) Write a Python program that prints all the numbers from 0 to 6 except 3 and 6
for y in range(7):
    if y==3 or y==6:
        continue
    else:
        print(y)
```

```
0
1
2
4
5
```

In [2]:
```
#2) Write a program to accept a number from a user and calculate the sum of all r
x=int(input("Enter a number:"))
count=0
for y in range(1,x+1):
    count=count+y
print(count)
```

```
Enter a number:4
10
```

In [13]:
```
#3) Write a program to print multiplication table of a given number(input).
def multiplication_table(x,y):
    for z in range(1,y):
        print("{}*{}={}".format(x,z,x*z))
```

In [14]:
```
multiplication_table(2,11)
```

```
2*1=2
2*2=4
2*3=6
2*4=8
2*5=10
2*6=12
2*7=14
2*8=16
2*9=18
2*10=20
```

In [9]:
```
#4) Write a program to count the total number of digits in a number using a while
#For example, the number is 75869, so the output should be 5.
num=int(input("Enter the number:"))
count = 0
while num!=0:
    count=count+1
    num//=10


print("Number of digits: " + str(count))
```

```
Enter the number:123456123456
Number of digits: 12
```

In [5]:
```
#5) 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 app
#successful guess, user will get a "Well guessed!" message, and the program will

while True:
    x=int(input("Enter a number between 1 to 20:"))
    if x!=6:
        print("Try the guess again")

    else:
        print("Well Guessed")
        break
```

```
Enter a number between 1 to 20:3
Try the guess again
Enter a number between 1 to 20:9
Try the guess again
Enter a number between 1 to 20:8
Try the guess again
Enter a number between 1 to 20:6
Well Guessed
```

In [13]:
```
#6) Write a Python program which iterates the integers from 1 to 60. For multiple
#and for the multiples of five print "Buzz".Fornumbers which are multiples of bot
for y in range(1,61):
    if y%3==0 and y%5==0:
        print("fizzBuzz")
    elif y%3==0:
        print("fizz")
    elif y%5==0:
        print("Buzz")
    else:
        print(y)
```

```
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 [26]:
```
#7) Write a Python program that accepts a string and calculate the number of digi
#Example:
#Input
#Python 3.2
#Output
#Letters 6
#Digits 2
x=str(input("enter a string:"))
p=q=0
for y in x:
    if y.isdigit():
        p=p+1
    elif y.isalpha():
        q=q+1
    else:
        continue
print("No. of Letters in the given String", q)
print("No. of Digits in the given string", p)
```

```
enter a string:dineshkumar1999
No. of Letters in the given String 11
No. of Digits in the given string 4
```

In [3]:
```
#8) 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 [34]:
```
x=input("Enter a Password:")
L=N=U=S=0
sc=['$','#','@']
y=len(x)
if y>=6 and y<=16:
    for i in x:
        if i.isupper():
            U=U+1
        if i.islower():
            L=L+1
        if i.isdigit():
            N=N+1
        if i in sc:
            S=S+1
if L>=1 and U>=1 and N>=1 and S>=1 and L+U+N+S==len(x):
    print("Password is Valid")
else:
    print("Password is Invalid")
```

```
Enter a Password:DineshKumar@1999
Password is Valid
```

In [6]:
```
#9) Write a program in Python to reverse a word by using while loop.
x=input("Enter the String:")
y=""
count=len(x)
while count>0:
    y=y+x[count-1]
    count=count-1
print ("The Reverse of the given String is:",y)
```

```
Enter the String:dineshkumar
The Reverse of the given String is: ramukhsenid
```

In [26]:
```
#10) Write a program which takes 10 integers as input using loop and print their
x=[1,2,3,4,5,6,7,8,9,10]
count=0
for y in x:
    count=count+y
print(count)
```

```
55
```

In [27]:
```
#11) Write a program which takes integer inputs from user until he/she presses “q
#input). Print average and product of all numbers.
list=[]
newlist=[]
p=1
while True:
    x=input('Enter the numbers:')
    if x=='q':
        print("Exit")
        break
    list.append(x)
for i in list:
    a=int(i)
    newlist.append(a)
for j in newlist:
    p=p*j
total=sum(newlist)
print("The Average of the Numbers is:{}".format(total/len(newlist)))
print("The Product of the Numbers is:{}".format(p))
```

```
Enter the numbers:2
Enter the numbers:3
Enter the numbers:6
Enter the numbers:7
Enter the numbers:7
Enter the numbers:q
Exit
The Average of the Numbers is:5.0
The Product of the Numbers is:1764
```

In [29]:
```
#12) Write a Python program which will remove all digits or any other characters
#Example:
#Input:
#“asd12.asd22”
#Innomatics
#Output:
#'asdasd'
x=input("Enter the String:")
l=""
for y in x:
    if y.isalpha():
        l=l+y
    else:
        continue
print("The Letters in the given String", l)
```

```
Enter the String:dinesh123
The Letters in the given String dinesh
```

In [30]:
```
#13) Write a python program to find the sum of all even numbers from 0 to 10.
sum=0
for x in range(0,11):
    if x%2==0:
        sum=sum+x
    else:
        continue
print("The Sum is :",sum)
```

```
The Sum is : 30
```

In [31]:
```
#14) Write a python program which will accept a digit and print
#All the numbers before it till 0
#Example:
#Input:
#5
#Output:
#4
#3
#2
#1
#0
y=int(input("Enter the number:"))
print("The number decreasing till 0")
while y>0:
    print(y-1)
    y=y-1
```

```
Enter the number:10
The number decreasing till 0
9
8
7
6
5
4
3
2
1
0
```

In [32]:
```
#15) Create a dynamic calculator which will run continually till you press “c”.
a=1
while a>=1:
    x=(input("Enter first number : "))
    if x=='C' or x=='c':
        print("End")
        break
    y=(input("Enter the Sign : "))
    z=float(input("Enter second number : "))
    if y=='+':
        print("{} + {} = {}".format(float(x),z,float(x)+z))
    elif y=='-':
        print("{} - {} = {}".format(float(x),z,float(x)-z))
    elif y=='*':
        print("{} * {} = {}".format(float(x),z,float(x)*z))
    elif y=='/':
        print("{} / {} = {}".format(float(x),z,float(x)/z))
    elif y=='%':
        print("{} / {} = {}".format(float(x),z,float(x)%z))
    elif y=='**':
        print("{}^{} = {}".format(float(x),z,float(x)**z))
    else:
        print("Invalid Sign")
a=a+1
```

```
Enter first number : 2
Enter the Sign : *
Enter second number : 3
2.0 * 3.0 = 6.0
Enter first number : 2
Enter the Sign : +
Enter second number : 6
2.0 + 6.0 = 8.0
Enter first number : 3
Enter the Sign : /
Enter second number : 4
3.0 / 4.0 = 0.75
Enter first number : c
End
```

In [ ]: