LOOPS, BREAK AND CONTINUE:

```
In [2]: str = "Python"
    for i in str:
        print(i)
          o
n
 c=n*i
print(n," * ",i," = ",c)
          6 * 1 = 6
6 * 2 = 12
6 * 3 = 18
6 * 4 = 24
6 * 5 = 30
6 * 6 = 36
6 * 7 = 42
6 * 8 = 48
6 * 9 = 54
6 * 10 = 60
  In [4]: list=[10,30,23,43,65,12]
         sum=0
for i in list:
          sum=sum+i
print("The sum is:",sum)
          The sum is: 183
In [5]: for i in range(14):
             print(i,end='')
           0 1 2 3 4 5 6 7 8 9 10 11 12 13
In [6]: n=int(input("Enter the number "))
           for i in range(1,11):
               c=n*i
               print(n,"*",i,"=",c)
           Enter the number 8
           8 * 1 = 8
           8 * 2 = 16
           8 * 3 = 24
           8 * 4 = 32
           8 * 5 = 40
           8 * 6 = 48
           8 * 7 = 56
           8 * 8 = 64
           8 * 9 = 72
           8 * 10 = 80
In [9]: n=int(input("Enter the number "))
           for i in range(2,n,2):
              print(i)
           Enter the number 18
           4
           6
           8
           10
           12
           14
           16
```

```
In [10]: list=['Maya','Suresh','Nithin','Namitha']
for i in range(len(list)):
    print("Hello",list[i])
                                Hello Maya
Hello Suresh
Hello Nithin
Hello Namitha
        print("for loop completely exhausted, since there is no break.")
                                for loop completely exhausted, since there is no break.
        In [12]: for i in range(0,7):
    print(i)
    print("bye")
    continue;
    print("hello")
    else:print("for loop is exhausted");
    print("The loop is broken due to break statement...came out of the loop")
                                bye
                                bye
ntdata.js
    bye
    4
    bye
   bye
    6
   bye
    for loop is exhausted
   The loop is broken due to break statement...came out of the loop % \left\{ 1,2,\ldots ,n\right\} =0
 namitha entered while loop before if statement Current Letter: n going back to starting of while loop entered while loop before if statement incremented if statement incremented entered if statement incremented entered while loop before if statement Current Letter: m going back to starting of while loop entered while loop before if statement Current Letter: i going back to starting of while loop entered while loop before if statement current letter: i going back to starting of while loop entered while loop before if statement i incremented entered while loop before if statement Current Letter: h going back to starting of while loop entered while loop before if statement current letter: h going back to starting of while loop entered while loop before if statement incremented
```

i incremented

```
In [16]: i=0
                                         str1='namitha'
                                        while i<len(str1):
                                                     if str[i]=='n':
i+=1
break
                                                       print('Current Letter :',str1[i])
                                                       i+=1
                                       Current Letter : n
Current Letter : a
Current Letter : m
Current Letter : i
Current Letter : t
     In [17]: #The pass statement is used to declare the empty loop.
#It is also used to define empty class, function and control statement
                                         str1='namitha'
                                        i=0
                                        while i <len(str1):
i+=1
                                       pass
print('Value of i : ',i)
                                        Value of i : 7
In [18]: i=1
#The while loop will iterate until condition becomes false
while(i<=10):
    print(i)
    i=i+1</pre>
In [19]: i=1
number=int(input("Enter the number:"))
while i<=10:
    print("%d X %d = %d \n"%(number,i,number*i))
    i=i+1</pre>
                                           Enter the number:10
10 X 1 = 10
                                          10 X 2 = 20
                                          10 X 3 = 30
                                          10 X 4 = 40
                                          10 X 5 = 50
                                         10 X 6 = 60
                                          10 X 7 = 70
                                                 10 X 8 = 80
                                                10 X 9 = 90
                                                 10 X 10 = 100
          In [ ]: while(1):
    print("Hi! we are inside the infinite while loop")
                                              while(1):

print("Hi! we are inside the infinite while loop
Hi! we are inside the infinite while loop
```

```
In [*]: var=1
while(var!=2):
    i=int(input("Enter the number:"))
    print("Entered value is %d"%(i))

Enter the number:1
Entered value is 1
Enter the number:3
Entered value is 3
Entered value is 3
Entered value is 5
Enter the number:
```

```
i=1
while(i<=5):
  print(i)
  i=i+1
else:
print("The while loop exhausted")
2
3
The while loop exhausted
i=1
while(i<=5):
 print(i)
  i=i+1
  if(i==3):
      break
else:
     print("The while loop exhausted")
print("bye bye")
1
bye bye
```

```
[4] list=[1,2,3,4]
       i=1;
       count=1;
       for i in list:
          if i==4:
             print("item matched")
             count=count+1;
             break
       print("found at",count,"location");
       item matched
       found at 2 location
[5] str="python"
       for i in str:
          if i=='o':
             break
          print(i)
       р
       У
       t
[7] n=2
     i=1;
while i<=10:
     print("%d X %d = %d\n"%(n,i,n*i));
i=i+1;
     choice=int(input("Do you want to continue printing the table, press 0 for no?"))
     if choice==0:
      break;
     n=n+1
   2 X 1 = 2
   2 X 2 = 4
   2 X 3 = 6
   2 X 4 = 8
   2 X 5 = 10
   2 X 6 = 12
   2 X 7 = 14
   2 X 8 = 16
 [7] 2 X 9 = 18
     2 X 10 = 20
     Do you want to continue printing the table, press 0 for no?0
[8] i=0 while(i<10):
      i=i+1
if(i==5):
      continue
print(i)
```

```
[9] str="Namitha"
     for i in str:
        if(i=='N'):
          continue
       print(i)
     а
     m
     i
     t
     h
[10] list=[1,2,3,4,5]
   flag=0
   for i in list:
     print("Current element:",i,end=" ");
     if i==3:
         print("\nWe are inside pass block\n");
         flag=1
     if flag==1:
         print("\nCame out of pass\n");
         flag=0
   Current element: 1 Current element: 2 Current element: 3
   We are inside pass block
   Came out of pass
   Current element: 4 Current element: 5
 [11] values={'N','A','M','I','T','H','A'}
        for val in values:
           pass
        for i in [1,2,3,4,5]:
           if(i==4):
              pass
              print("This is pass block",i)
           print(i)
        1
        2
        3
        This is pass block 4
        5
```
