```
In [1]: # creating list
         a=[]
         b=[1,2,3,4,5,6]
         c=["Apple","Orange","Banana","Kiwi","Mango"]
In [2]: #Add 2 Lists
         # Append
         d=b+c
         print(d)
         [1, 2, 3, 4, 5, 6, 'Apple', 'Orange', 'Banana', 'Kiwi', 'Mango']
 In [3]: # Append(for and in)
         sum=0
         for num in a:
          sum=sum+a
         print(sum)
         0
         #Add items into the list
In [19]:
         #Appending(range)
         s=[]
         for i in range(3,15,2):
          s.append(i)
         print(s)
         [3, 5, 7, 9, 11, 13]
         #Appending
In [20]:
         p=["a","b","c"]
         p.append("G")
         print(p)
         ['a', 'b', 'c', 'G']
In [22]: #inserting
         o=[12,1,45,78]
         t=[]
         o.insert(5,88)
         t.insert(0,23.5)
         print(o)
         print(t)
         [12, 1, 45, 78, 88]
         [23.5]
In [23]: #Displaying the List
         print(a)
         print(b)
         print(c)
         print(d)
         print(sum)
         print(s)
         print(p)
         print(t)
```

```
[]
         [1, 2, 3, 4, 5, 6]
         ['Apple', 'Orange', 'Banana', 'Kiwi', 'Mango']
         [1, 2, 3, 4, 5, 6, 'Apple', 'Orange', 'Banana', 'Kiwi', 'Mango']
         [3, 5, 7, 9, 11, 13]
         ['a', 'b', 'c', 'G']
         [23.5]
In [24]: #Accessing Elements in Lists
         Q=[1,2,3,4,5,6,7]
         print("Original list is : " + str(Q))
         print("List index-value are : ")
         for i in range(len(Q)):
             print(i, end=" ")
             print(Q[i])
         Original list is: [1, 2, 3, 4, 5, 6, 7]
         List index-value are :
         0 1
         1 2
         2 3
         3 4
         4 5
         5 6
         6 7
In [25]: #Accessing Elements in Lists
         E=[1,2,3,4,5,6,7]
         print("Original list is : " + str(E))
         print("List index-value are : ")
         print([list((i, E[i])) for i in range(len(E))])
         Original list is : [1, 2, 3, 4, 5, 6, 7]
         List index-value are :
         [[0, 1], [1, 2], [2, 3], [3, 4], [4, 5], [5, 6], [6, 7]]
In [26]: #Accessing elements
         programming_lang = ['P','Y','T','H','0','N']
         print(programming_lang)
         print("At index 0:", programming_lang[0])
         print("At index 3:",programming_lang[3])
         ['P', 'Y', 'T', 'H', 'O', 'N']
         At index 0: P
         At index 3: H
In [28]: #Length of List
         programming_lang = ['P','Y','T','H','O','N']
         print("Length of the List:",len(programming_lang))
         Length of the List: 6
In [33]:
         #Length of Particular item in list
         programming_lang = ['P','Y','T','H','O','N']
         print("Length of the letter P is:",len(programming_lang))
         Lenth of the letter P is: 6
In [39]:
         #Assignment operator in list
         list1 = [1,2,3,4,5]
         list2 = [6,7,8,9]
         list3 = list1
```

```
list4 = [1,2,3,4,5]
          list4 += [45,78,90]
          print(list1)
          print(list2)
          print(list3)
          print(list4)
          [1, 2, 3, 4, 5]
         [6, 7, 8, 9]
          [1, 2, 3, 4, 5]
          [1, 2, 3, 4, 5, 45, 78, 90]
In [41]: a = ["apple", "banana", "cherry"]
          i = 0
          while i < len(a):</pre>
            print(a[i])
            i = i + 1
          apple
         banana
         cherry
 In [ ]:
```