Class: XI	SUB: Computer Science	Date of Completion: 26-10-2020
Worksheet No:7	TOPIC : Practical & theory Questions on LIST Manipulation	All the programs and output questions to be excecuted(Q.I,II and IV)

Q-I

1. Read any N number of prices(integers) of items in a list called List1.Delete 4th element and display the list. Remove 3rd element and display the deleted element and the list.

2. Differentiate between del statement and pop () when operated on the list L1.

3. Create a list called L1, that holds roll number of a student, percentage, name, grade and planned percentage. Use append ( ) to create the list. Display the last item in two different ways.

4. In a list there are 5 subject marks which are already stored. the following operations on this list Marks.
   i.   What is the index of the mark X.
   ii.   Insert the Marks 100 after this mark X.
   iii.   Extend the list with new list of marks as shown New_Mark= [96,99]
   iv.   Remove the mark X from the list.

5. Create a list called Salary which holds the monthly payment of N number of employees. Perform the operations the list.
   i.   Show the Lowest salary, Highest Salary, Average Salary
   ii.   Show the list arranged in ascending order
   iii.   Display the list in descending order.

6. Read your name as a String Str1, replace the last character with X (any character entered by the user) and display the string as a sequence of characters.

7. Read the class/Grade for N number of students into a list called Grade. Read the Grade X (any grade read from the user).
   Perform the following tasks
   a. How many grade X are present
   b. Replace the grade X by E
   c. Find the location /index of very first X as a grade.
   d. Print the final list in reverse order.

8. Consider a list L1= [5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20], create two lists L2 and L3. Where L2 holds the elements which are divisible by 3 of the list L1. A list L3 will hold all the odd indexed elements of L1. From the list L2 display the last element (use two different methods). From the list L1 delete the elements in the range of P and Q.

9. If the list L1 is [1,'A',3.456," Muscat"], then perform the following operations.
   a. Join /concatenate L1 with list L2=['Oman','G',100,22.345]
      (can be done in three different ways)
   b. Print the list L1, 3 times.
   c. Append L1 to L2, then find its length.
   d. Extend L1 to L2, then find the length.

Q.II.Guess the output

   L1= [2,3,4,5,6]

   L2= [6,7,8]

   L1. append(L2)

   print(L1[5][1])

   print(L2[0:2])

   print(L1[-2:0:-1])

   List1=["Those", "were", 'a',["Very","good","words"],"which","we",'will','Use']

   print(List1[3:4])

   print(List1[3:4][0])

   print(List1[3:4][0][1])

   print (List1[3:4][0][1][2])

   print ("good" in List1)

   print ("words" in List1[3])

   print (List1[0::2])

   print (List1[4:])

Q.III .Answer the following questions:

   a. What is a list in python?

   b. Differentiate between del, remove ( ) and pop ( ) with a suitable example.

   c. How append ( ) is different form extend ( )?

   d. Name the functions that sorts the List1 in ascending and descending order.

   e. What is count ( ) and reverse ( ) methods do on the list List1?

Q.IV Guess the output.

a. >>>lst= [10,12,14,20,22,24,30,32,34]

>>>seq=lst [3: -3]

>>>seq

>>>seq [1] =28

>>>seq

b. >>>lst= [10,12,14,20,22,24,30,32,34]

>>>lst [3:30]

>>>lst [-15:7:-1]

>>>lst [10:20]

>>>lst [6:10]

c. >>>L= ["one"," two", "three"]

>>>L [0:2] = [0,1]

>>>L

>>>L [0:2] =" a"

>>>L

d. >>>L1= [1,2,3]

>>>L1[2:] ="756"

>>>L1

e. >>>L1= [1,2,3]

>>>L1[10:20] =" abcd"

>>>L1

>>>L1[1] =35

>>>L1

Note: All 9 programs listed in Q-I will be written in the recordbook.