



INDIAN SCHOOL AL WADI AL KABIR

Class: 11th (IP)	Department: Computer Science	Date of submission:
Worksheet No:06	Topic: Lists	Note: Use python 3.7.x version

1. What is a list?
2. What are nested lists? Give examples.
3. What is the difference between `append()` and `extend()`?
4. What is the difference between `remove()` and `pop()`?
5. Consider the following list `myList`. What will be the elements of `myList` after each of the following operations?
`myList = [10,20,30,40]`
 - a) `myList.append([50,60])`
 - b) `myList.extend([80,90])`
6. What will be the output of the following code segment?
`myList = [1,2,3,4,5,6,7,8,9,10]`
`for i in range(0,len(myList)):`
`if i%2 == 0:`
`print(myList[i])`
7. What will be the output of the following statements?
 - a) `list1 = [12,32,65,26,80,10]`
`list1.sort()`
`print(list1)`
 - b) `list1 = [12,32,65,26,80,10]`
`sorted(list1)`
`print(list1)`
 - c) `list1 = [1,2,3,4,5,6,7,8,9,10]`
`print(list1[::-2])`
`print(list1[:3] + list1[3:])`
 - d) `list1 = [1,2,3,4,5]`
`print(list1[len(list1)-1])`
8. Start with the list `[100,150,200]`, Do the following using list functions:
 - (i) Modify the second element as 120
 - (ii) Add 350,240,650 to the end of the list.
 - (iii) Remove the third element from the list
 - (iv) Sort the list
 - (v) Double the list
 - (vi) Insert 275 at index 3

9. For a given list find the output for the following:

```
L=['These',['are','a'],'few','words',['that','we'],'will','use']  
print(len(L))  
print(L[1:4])  
print(L[1:4][0])  
print(L[1:4][0][1])  
print(L[1:4][0][0][2])  
print('few' in L)  
print('are' in L)  
print('that' in L[4])  
print([L[0]+L[1])  
print(L[:3])  
print(L[2]+L[6])
```

10. Write a program to find the number of times an element occurs in the list.

11. Write a program to read a list of n integers (positive as well as negative). Create two new lists, one having all positive numbers and the other having all negative numbers from the given list. Print all three lists.

12. Write a program to find the largest and the smallest elements in a given list of elements.

13. Write a program to input N numbers in to a list and multiply 2 to all elements in the odd index and increment all elements in the even index with 5.

14. Write a program to input N students marks in a list and calculate the total and percentage

15. Write a program to input N numbers in to a list and print the elements which are divisible by 7