

SBOA SCHOOL & JUNIOR COLLEGE, CHENNAI – 101

**COMPUTER SCIENCE – Python**

STD : XII 2020 - 2021

Assignment : 2 LISTS

1. . Write a Python program to count the number of strings where the string length is 2 or more and the first and last character are same from a given list of strings.

Sample List : ['abc', 'xyz', 'aba', '1221']

Expected Result : 2

2. Write a Python program to get a list, sorted in increasing order by the last element in each tuple from a given list of non-empty tuples.

Sample List : [(2, 5), (1, 2), (4, 4), (2, 3), (2, 1)]

Expected Result : [(2, 1), (1, 2), (2, 3), (4, 4), (2, 5)]

3. Write a Python program to remove duplicates from a list.

4. Write a Python program to check a list is empty or not

5. Write a Python program to find the list of words that are longer than n from a given list of words.

6. Write a Python program that takes two lists and displays True if they have at least one common member.

7. Write a Python program to print a specified list after removing the 0th, 4th and 5th elements.

Sample List : ['Red', 'Green', 'White', 'Black', 'Pink', 'Yellow']

Expected Output : ['Green', 'White', 'Black']

8. Write a Python prog. print the numbers of a specified list after removing even numbers from it

9. Write a Python program to generate and print a list of first and last 5 elements where the values are square of numbers between 1 and 30 (both included)

10. Write a Python program to append a list to the second list

11. Write a Python program to find the second largest number in a list

12. Write a Python program to get unique values from a list

13. Write a Python program to get the frequency of the elements in a list

14. Write a Python program to count the number of elements in a list within a specified range

15. Write a Python program to get the difference between the two lists

16. Write a Python program to convert a list of characters into a string

17. Write a Python program to find the second smallest number in a list

18. Write a Python program to check whether a list contains a sublist

19. Write a Python program to create a list by concatenating a given list which goes from 1 to N

sample list : ['p','q']

n=5

output: ['p1','q1', 'p2','q2', 'p3','q3', 'p4','q4', 'p5','q5']

20. Write a Python program to find common items from two lists

21. Write a Python program to convert a list of multiple integers into a single integer

sample list : [11,33,50]

Expected Output : 113350

22. Write a program to select the odd items of a list

23. Write a Python program to split a list every Nth element

Sample List : ['a','b','c','d','e','f','g','h','i','j','k','l','m','n']

Expected Output: [['a','d','g','j','m'], ['b','e','h','k','n'], ['c','f','i','l']]

24. Write a Python program to extend a list without append

Sample data : [10,20,30]

[40,50,60]

Expected Output:[40,50,60,10,20,30]

25. Write a Python program to remove duplicates from a list of lists

sample list : [[10,20],[40],[30,56,25],[10,20],[33],[40]]

New list : [[10,20],[30,56,25],[33],[40]]

26. Write a Python program to insert an element at a specified position into a given list

original list : [1,1,2,3,4,4,5,1]

After removing an element in the Kth position : [ 1,1,3,4,4,5,1]

27. Start with the list[8,9,10]. Do the following using list functions

- (a) Set the second entry (index 1) to 17
- (b) Add 4, 5 and 6 to the end of the list.
- (c) Remove the first entry from the list.
- (d) Sort the list.
- (e) Double the list.
- (f) Insert 25 at index 3

28. If a is [1, 2, 3], what is the difference (if any) between a\*3 and [a, a, a]?

29. x=[12,13,14]; y=list(x)+[15,16,17]; print(x, ' ',y) Also justify your answer.

30. Write a program to accept two lists, list1 contains 3 even numbers and list2 contains 3 odd numbers and create a third list which should contain each element of list1 followed by list2 and display all the lists.

[Example : list1=[56,12,34], list2=[55,29,49] and list3=[56,55,12,29,34,49]

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