

Lab 04: Assignment

1. Write a Python program to sum all the items in a list.
2. Write a Python program to multiply all the items in a list.
3. Write a Python program to get the largest number from a list without using inbuilt function.
4. Write a Python program to get the smallest number from a list without using inbuilt function.
5. 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
6. Write a Python program to remove duplicates from a list.
7. Write a Python program to check a list is empty or not.
8. Write a Python program to find the list of words that are longer than length 'n' from a given list of words.
9. Write a Python function that takes two lists and returns True if they have at least one common member.
10. Write a Python program to print the numbers of a specified list after removing even numbers from it
11. Write a Python program to generate a list of elements where the values are square of numbers between 1 and 30 (both included).
12. Write a Python program to convert a list of characters into a string.
13. Write a python program to check whether two lists are circularly identical.
14. Write a Python program to find the second largest number in a list.
15. Write a Python program to get unique values from a list.
16. Write a Python program to count the number of elements in a list within a specified range.
17. Consider a list (list = []). You can perform the following commands:
 - a. insert(i,e): Insert integer e at position i.
 - b. print: Print the list.
 - c. Remove(e): Delete the first occurrence of integer e.
 - d. Append(e): Insert integer e at the end of the list.
 - e. sort: Sort the list.
 - f. pop: Pop the last element from the list.
 - g. reverse: Reverse the list.

Initialize your list and perform the operations as per the user input from the given set of 7 commands. Continue the process of creating the list until the user enters 'DONE' as input.

18. Given the names and grades for each student in a class of students, store them in a nested list and print the name(s) of any student(s) having the second lowest grade.
Note: If there are multiple students with the second lowest grade, order their names alphabetically and print each name on a new line.

Example

```
Records=[["MAAZA",20.00],["SPRITE",30.00],["PEPSI",30.00]
```

The ordered list of scores is [20.00,30.00,30.00], so the second lowest score is 30.00. There are two students with that score: ["SPRITE","PEPSI"]. Ordered alphabetically, the names are printed as:

"PEPSI"

"SPRITE"

19. Write a python program to check if a list contains three consecutive numbers.
20. Write a python program to remove all the occurrences of a given element from a list
21. Write a python program to swap 2 mentioned characters at index (a,b) in any given string
22. Write a python program to remove all the duplications from a given list
23. Write a python program to extract tuples with 'k' digit elements
24. Given two tuples, write a python program to find the intersecting elements
25. Write a python program to remove duplicates from a tuple
26. Write a python program to check if two tuples are same or not.
27. Write a python program to accept a string (having uppercased and lowercased characters) from user and convert it to uppercased string
28. Write a python program to accept a string from user and display by incrementing each word by one unit. For eg: incrementing 'a' will give 'b', 'A' will give 'B', 1 will give 2 and so on.
29. Write a python program to accept a miscellaneous string (with characters, digits and special characters) and store them in separate strings of characters, digits and special characters.
30. Write a python program to accept a string and sort the string in descending order.
31. Write a python program to accept a string and remove the vowels from that string.