

1. Write a Python program to find sum of elements in list?

**Ans:**

```
In [7]: 1 string = list(input('Enter a list of numbers: ').split())
2 print('List: ',string)
3 result = 0
4 for i in range(0,len(string)):
5     result += int(string[i])
6 print(result)
```

```
Enter a list of numbers: 1 15 5 17
List: ['1', '15', '5', '17']
38
```

2. Write a Python program to Multiply all numbers in the list?

**Ans:**

```
In [14]: 1 string = list(input('Enter a list of numbers: ').split())
2 print('List: ',string)
3 result = 1
4 for i in range(1,len(string)):
5     result *= int(string[i])
6 print(result)
```

```
Enter a list of numbers: 11 15 17 1
List: ['11', '15', '17', '1']
255
```

3. Write a Python program to find smallest number in a list?

**Ans:**

```
In [3]: 1 string = list(input('Enter a list of numbers: ').split())
2 print('List: ',string)
3 lower = int(string[0])
4 for i in range(len(string)):
5     if (lower>int(string[i])):
6         lower = int(string[i])
7 print(lower)
```

```
Enter a list of numbers: 1 17 15 5
List: ['1', '17', '15', '5']
1
```

4. Write a Python program to find largest number in a list?

**Ans:**

```
In [4]: 1 string = list(input('Enter a list of numbers: ').split())
2 print('List: ',string)
3 largest = int(string[0])
4 for i in range(len(string)):
5     if (largest<int(string[i])):
6         largest = int(string[i])
7 print(largest)
```

```
Enter a list of numbers: 1 15 17 5
List: ['1', '15', '17', '5']
17
```

5. Write a Python program to find second largest number in a list?

**Ans:**

```
In [6]: 1 string = list(input('Enter a list of numbers: ').split())
2 print('List: ',string)
3 largest = int(string[0])
4 secondlargest = 0
5 for i in range(len(string)):
6     if (largest < int(string[i])):
7         largest = int(string[i])
8 for i in range(len(string)):
9     if int(string[i]) > secondlargest and int(string[i]) != largest:
10         secondlargest = int(string[i])
11 print(secondlargest)

Enter a list of numbers: 1 15 5 1 17
List: ['1', '15', '5', '1', '17']
15
```

6. Write a Python program to find N largest elements from a list?

**Ans:**

```
In [1]: 1 string = list(input('Enter a list of numbers: ').split())
2 print('List: ',string)
3 string.sort()
```

Enter a list of numbers: 2 11 65 70 93  
List: ['2', '11', '65', '70', '93']

```
In [2]: 1 print('Enter number of largest numbers to be displayed: ')
2 n = int(input())
3 print(string[-n: ])
```

Enter number of largest numbers to be displayed:  
3  
['65', '70', '93']

7. Write a Python program to print even numbers in a list?

**Ans:**

```
In [9]: 1 string = list(input('Enter a list of numbers: ').split())
2 print('List: ',string)
3 print('Even numbers in the list are: ')
4 for ele in string:
5     if int(ele) % 2 == 0:
6         print(ele, end=' ')
```

Enter a list of numbers: 1 24 5 82 22 17 15  
List: ['1', '24', '5', '82', '22', '17', '15']  
Even numbers in the list are:  
24 82 22

8. Write a Python program to print odd numbers in a List?

**Ans:**

```
In [10]: 1 string = list(input('Enter a list of numbers: ').split())
2 print('List: ',string)
3 print('Odd numbers in the list are: ')
4 for ele in string:
5     if int(ele) % 2 != 0:
6         print(ele, end=' ')
```

Enter a list of numbers: 1 24 5 82 22 17 15  
List: ['1', '24', '5', '82', '22', '17', '15']  
Odd numbers in the list are:  
1 5 17 15

9. Write a Python program to Remove empty List from List?

**Ans:**

```
In [13]: 1 list = [1, [], 3, [], 5, [], [], 8,9]
2 print('The original list is : ', str(list))
3 output = [ele for ele in list if ele != []]
4 print ('After removing empty lists :', str(output))
```

The original list is : [1, [], 3, [], 5, [], [], 8, 9]  
After removing empty lists : [1, 3, 5, 8, 9]

10. Write a Python program to Cloning or Copying a list?

**Ans:**

```
In [2]: 1 string = input('Enter a list of numbers: ').split()
2 print('Original List: ',string)
3 def Cloning(string):
4     clone = string[:]
5     return clone
6 print('Copy:', Cloning(string))
```

Enter a list of numbers: 1 15 5 17 22  
Original List: ['1', '15', '5', '17', '22']  
Copy: ['1', '15', '5', '17', '22']

11. Write a Python program to Count occurrences of an element in a list?

**Ans:**

```
In [4]: 1 string = input('Enter a list of numbers: ').split()
2 x = int(input('Enter the element for counting: '))
3 count = 0
4 for ele in string:
5     if int(ele) == x:
6         count += 1
7 print(count)
```

Enter a list of numbers: 1 15 1 5 1 17 1 22  
Enter the element for counting: 1  
4