

Python Basic Programming Assignment 10

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

In [2]:

```
1 l = [2, 4, 1, 5, 6, 7]
2
3 total = 0
4 for i in l:
5     total += i
6
7 print(total)
```

25

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

In [3]:

```
1 l = [2, 4, 1, 5, 6, 7]
2
3 mul = 1
4 for i in l:
5     mul *= i
6
7 print(mul)
```

1680

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

In [7]:

```
1 l = [2, 0, 1, 1235, 6, -7123]
2
3 minimum = l[0]
4 for i in l:
5     if i < minimum:
6         minimum = i
7
8 print(minimum)
```

-7123

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

In [8]:

```
1 l = [2, 0, 1, 1235, 6, -7123]
2
3 maximum = l[0]
4 for i in l:
5     if i > maximum:
6         maximum = i
7
8 print(maximum)
```

1235

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

In [16]:

```
1 l = [2, 0, 1, 1235, 6, -7123]
2 l.sort(reverse=True)
3 print("Second largest number:", l[1])
```

Second largest number: 6

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

In [18]:

```
1 def findLarge(lst, n):
2
3     lst.sort(reverse = True)
4     return lst[n-1]
```

In [19]:

```
1 # 2nd Largest Element
2
3 l = [2, 0, 1, 1235, 6, -7123]
4 findLarge(l, 2)
```

Out[19]:

6

In [20]:

```
1 # 4th Largest Element
2
3 l = [2, 0, 1, 1235, 6, -7123]
4 findLarge(l, 4)
```

Out[20]:

1

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

In [23]:

```
1 l = [2, 0, 1, 1235, 6, -7123, 21, 54, 12, -23, -42]
2
3 [ i for i in l if i%2 == 0]
```

Out[23]:

```
[2, 0, 6, 54, 12, -42]
```

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

In [26]:

```
1 l = [2, 0, 1, 1235, 6, -7123, 21, 54, 12, -23, -42]
2
3 [ i for i in l if i%2 == 1]
```

Out[26]:

```
[1, 1235, -7123, 21, -23]
```

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

In [71]:

```
1 l = [[], 12, 31, [1,2, -23] , [1], [], [123.23], [], 2, 321]
2
3 result = []
4 for i in l:
5     if type(i) == list:
6         if len(i) != 0:
7             result.append(i)
8     else:
9         result.append(i)
10
11 result
12
13
```

Out[71]:

```
[12, 31, [1, 2, -23], [1], [123.23], 2, 321]
```

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

In [74]:

```
1 list1 = [2,1, 31, 3, 412, 3, 4667, [2,3,1]]
2 list2 = []
3
4 for i in list1:
5     list2.append(i)
6
7 print(list2)
```

```
[2, 1, 31, 3, 412, 3, 4667, [2, 3, 1]]
```

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

In [76]:

```
1 l = [1,1,1, 3, 4, 1, 7, 8, 6,6,2,1]
2
3 def occurrences(lst, element):
4     count = 0
5     for i in lst:
6         if i == element:
7             count += 1
8
9     return count
```

In [77]:

```
1 occurrences(l, 1)
```

Out[77]:

5

In []:

```
1
```