

PYTHON LAB – 12

LISTS

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QUESTIONS

1. Write a Python program to sum all the items in a list.
2. Write a Python program to get the largest and smallest number from a list without builtin functions.
3. Write a Python program to find duplicate values from a list and display those.
4. Write a Python program to split a given list into two parts where the length of the first part of the list is given.

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

Length of the first part of the list: 3

Splitted the said list into two parts:

([1, 1, 2], [3, 4, 4, 5, 1])

5. Write a Python program to traverse a given list in reverse order, and print the elements with the original index.

Original list: ['red', 'green', 'white', 'black']

Traverse the said list in reverse order:

black

white

green

red

1. Write a Python program to sum all the items in a list.

```
List = [11,67,23,84,34] #Taking list
Sum = 0 #Assigning variable value to 0
for ele in List: #iterating each element in list
    Sum = Sum + ele #Adding each element
print("The list is : ",List) #printing list
print("The sum of all the items in list is : ",Sum) #printing sum of elements
```

OUTPUT:

The list is : [11, 67, 23, 84, 34]

The sum of all the items in list is : 219

2. Write a Python program to get the largest and smallest number from a list without builtin functions.

```
list = [11, 5, 17, 18, 23, 19, 26, 29] #creating list
max = list[0] #Assigning 1st element of list to max
variable
min = list[0] #Assigning 1st element of list to min
variable
for ele in list: #iterate each element in list

    if ele > max: #Checking if element is greater than
max
        max = ele    #if true assigning ele to max

    if ele < min: #Checking if element is lesser than
min
        min = ele #if true assigning ele to min
print("The list is : ",list) #printing list
print("The largest number in the list is : ",max)
#printing largest number
print("The smallest number in the list is : ",min)
#printing smallest number
```

OUTPUT:

The list is : [11, 5, 17, 18, 23, 19, 26, 29]

The largest number in the list is : 29

The smallest number in the list is : 5

3. Write a Python program to find duplicate values from a list and display those.

```
list = [1, 2, 1, 2, 3, 4, 5, 1, 1, 2, 5, 6, 7, 8, 9, 9]
#creating list
unique_list = [] #creating unique list
duplicate_list = [] #creating duplicate list
for ele in list: #iterating each element in list
    if ele not in unique_list: #checking if element is not
in unique list
        unique_list.append(ele) #if condition is true , adding
element to list

for i in unique_list: #iterating each element in unique
list
    if list.count(i) > 1: #if element is occurred more
than once
        duplicate_list.append(i) #adding element to
duplicate list
print("The list is : ",list) #printing original list
print("The duplicate values in the list are : ",
duplicate_list) #printing duplicate list
```

OUTPUT:

The list is : [1, 2, 1, 2, 3, 4, 5, 1, 1, 2, 5, 6, 7, 8, 9, 9]

The duplicate values in the list are : [1, 2, 5, 9]

4. Write a Python program to split a given list into two parts where the length of the first part of the list is given.

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

Length of the first part of the list: 3

Split the said list into two parts:

([1, 1, 2], [3, 4, 4, 5, 1])

```
list = [1, 1, 2, 3, 4, 4, 5, 1] #creating list
length = 3 #Assigning value
First_part = list[:length] #Take elements of list
before length
Second_part = list[length:] #Take elements of list
from length
print("The list is : ",list) #Printing list
print("The first part of the list is :
",First_part) #printing first part of the list
print("The second part of the list is :
",Second_part) #printing second part of the list
```

OUTPUT:

The list is : [1, 1, 2, 3, 4, 4, 5, 1]

The first part of the list is : [1, 1, 2]

The second part of the list is : [3, 4, 4, 5, 1]

5. Write a Python program to traverse a given list in reverse order, and print the elements with the original index.

Original list: ['red', 'green', 'white', 'black']

Traverse the said list in reverse order: black , white , green, red

```
list = ['red', 'green', 'white', 'black'] #Given list
for i in range(len(list)-1,-1,-1): #iterating each element in list in reverse order
    print(i,'-->',list[i]) #printing result
```

OUTPUT:

3 --> black

2 --> white

1 --> green

0 --> red