# **PYTHON: ASSIGNMENT 02(Intermittent Questions)**

#### **PROBLEM STATEMENT 1:**

```
Given a list
```

```
L : [1,1,1,1,2,2,3,3,3,3,4,5]
```

Write a program to print only unique elements

Note: Don't convert List to Set

### **Expected Output**

Unique List: [1, 2, 3, 4, 5]

#### CODE:

```
L=[1,1,1,1,2,2,3,3,3,3,4,5]
print("The given list:" ,L)
new_list=[]
for i in L:
    if i not in new_list:
        new_list.append(i)
print("The unique values in the list are:", new_list)
```

### **EXECUTION:**

```
L=[1,1,1,1,2,2,3,3,3,3,4,5]

print("The given list:" ,L)

new_list=[]

for i in L:

    if i not in new_list:

        new_list.append(i)

print("The unique values in the list are:", new_list)

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

The unique values in the list are: [1, 2, 3, 4, 5]
```

#### **OUTPUT:**

```
The given list: [1, 1, 1, 1, 2, 2, 3, 3, 3, 3, 4, 5]
The unique values in the list are: [1, 2, 3, 4, 5]
```

### **PROBLEM STATEMENT 2:**

Given a list

$$L = [1,2,3,4, [4,3]]$$

Check if the given number exist in the inner list

### **CODE:**

```
l=[1,2,3,4,[4,5]]
print("The given list is:" ,1)
index=(1[4])
x=input("Enter the number: ")
if int(x) in index:
    print("The given number exists in the inner list")
else:
    print("The number does not exists in the list")
```

#### **EXECUTION:**

#### Case1:

When user input exists in the list

```
| [2] l=[1,2,3,4,[4,5]]
| print("The given list is:" ,1)
| index=(1[4])
| x=input("Enter the number: ")
| if int(x) in index:
| print("The given number exists in the inner list")
| else:
| print("The number does not exists in the list")
The given list is: [1, 2, 3, 4, [4, 5]]
| Enter the number: 5
| The given number exists in the inner list
```

#### Case2:

When user input does not exist in the list

```
[3] l=[1,2,3,4,[4,5]]
    print("The given list is:" ,1)
    index=(1[4])
    x=input("Enter the number: ")
    if int(x) in index:
        print("The given number exists in the inner list")
    else:
        print("The number does not exists in the list")
The given list is: [1, 2, 3, 4, [4, 5]]
Enter the number: 7
The number does not exists in the list
```

## **OUTPUT:**

- The given list is: [1, 2, 3, 4, [4, 5]]
  Enter the number: 7
  The number does not exists in the list
  - The given list is: [1, 2, 3, 4, [4, 5]]
    Enter the number: 4
    The given number exists in the inner list