In [2]:
```
#1. Given a list of numbers, write a python program that returns a new list wh
#duplicate elements removed. And is sorted in an increasing order.

l=[2,7,4,5,6,1,1,9,9,8,7,7,3]
print("the list : ",l)
new_list=[]
for x in l:
    if x not in new_list:
        new_list.append(x)
print("new list after removing duplicates :",new_list)
new_list.sort()
print(new_list)
```

```
the list :  [2, 7, 4, 5, 6, 1, 1, 9, 9, 8, 7, 7, 3]
new list after removing duplicates : [2, 7, 4, 5, 6, 1, 9, 8, 3]
[1, 2, 3, 4, 5, 6, 7, 8, 9]
```

In [5]:
```
#2.  Write a Python program where you will iterate over both keys and values i

x={1:"a",2:"b",3:"c",4:"d"}
for y,z in x.items():
    print(y,z)
```

```
1 a
2 b
3 c
4 d
```

In [6]:
```
#3. Write a Python program that takes a dictionary of student names and return
#Ex: Input: {“Student 1”: "Tarun", "Student 2”: "Manoj", "Student 3”: "Gephi”}
#Output:[“Gephi”,”Manoj”,” Tarun”]

a=int(input("Enter the number of students: "))
d={};l=[]
for x in range(0,a):
    k="Student"+str(x+1)
    v=input("Enter the student name : ")
    d.update({k:v})
print("Input: ",d,"\n")
for p in d.values():
    l.append(p)
l.sort()
print(l)
```

```
Enter the number of students: 3
Enter the student name : Tarun
Enter the student name : Manoj
Enter the student name : Gephi
Input:  {'Student1': 'Tarun', 'Student2': 'Manoj', 'Student3': 'Gephi'}

['Gephi', 'Manoj', 'Tarun']
```

In [1]:
```
#4.Write a Python which returns a new list of Booleans, from a given number. I
#.append True if the digit is 1 and False if it is 0.
#Ex: Input: “01001”
#Output: [“False”, “True”, “False”,” False”,” True”]

l=[]
a=input("Enter a string containing 0's and 1's: ")
for x in a:
    if x=="1":
        l.append("True")
    else:
        l.append("False")
print(l)
```

```
Enter a string containing 0's and 1's: 10110
['True', 'False', 'True', 'True', 'False']
```

In [2]:
```
#5. Write a Python program where you will return a dictionary where the keys w
#the values will be the occurrence of the character in the string, and it shou
#Ex: Input: “my name is ame”
#Output: {“m”:3,” y”:1,” n”:1,” a”:2,” e”:2,” i”:1,” s”:1}

d={};
a=input("Enter a string: ")
for x in a:
    if not(x==" "):
        d.update({x:a.count(x)})
    else:
        continue
print(d)
```

```
Enter a string: sai ram teja
{'s': 1, 'a': 3, 'i': 1, 'r': 1, 'm': 1, 't': 1, 'e': 1, 'j': 1}
```

In [3]:
```
#6.Given a dictionary containing the names and ages of a group of people, retu
#Ex: Input:{"Tmma": 41, "Ackes": 45, "myna": 15, "Benthon": 29}
#Output:"Ackes"

d={};e=0;f=''
a=int(input("Enter the length of the dictionary: "))
for x in range(0,a):
    k=input("Enter name: ")
    v=int(input("Enter age: "))
    d.update({k:v})
print("\nInput: ",d)
for m,n in d.items():
    if e<n:
        e=n
        f=m
print(f)
```

```
Enter the length of the dictionary: 4
Enter name: Tmma
Enter age: 41
Enter name: Ackes
Enter age: 45
Enter name: myna
Enter age: 15
Enter name: Benthon
Enter age: 29

Input:  {'Tmma': 41, 'Ackes': 45, 'myna': 15, 'Benthon': 29}
Ackes
```

In [7]:
```
#8. Create a program that returns a list of items that you can afford in the s
#Create a dictionary with items as key and price as values.
#Ex: Input: {"water bottles":20,"Chips":10,"Iphone":49000,"towel":90,"pens":58
#Your wallet balance:- 50
#Output: [“water bottles”, “chips”]

store={"water bottles":20,"Chips":10,"Iphone":49000,"towel":90,"pens":58,"cake
wallet=int(input("Enter the money you have in wallet: "))
s=0;l=[]
for x,y in store.items():
    s+=y
    if s<wallet:
        l.append(x)
print("\nYour wallet balance: ",wallet)
print(l)
```

```
Enter the money you have in wallet: 50

Your wallet balance:  50
['water bottles', 'Chips']
```

In [8]:
```
#9. Write a Python program to create a union of sets.

set1=set();set2=set()
a=int(input("Enter the length of set1 "))
for x in range(0,a):
    p=input("Enter a value: ")
    set1.add(p)
b=int(input("Enter the length of set2 "))
for y in range(0,b):
    q=input("Enter a value: ")
    set2.add(q)
print(set1.union(set2))
```

```
Enter the length of set1 3
Enter a value: a
Enter a value: b
Enter a value: c
Enter the length of set2 4
Enter a value: 1
Enter a value: 1.2
Enter a value: 3
Enter a value: d
{'b', 'a', 'd', '1', '1.2', 'c', '3'}
```

In [1]:
```
#10.Write a Python program to check if a given value is present in a set or no

set1=set()
a=int(input("Enter the length of the set: "))
for x in range(0,a):
    p=input("Enter a value: ")
    set1.update(p)
b=input("\nEnter the value : ")
if b in set1:
    print(b,"is presnt.")
else:
    print(b,"not found.")
```

```
Enter the length of the set: 4
Enter a value: a
Enter a value: b
Enter a value: 2
Enter a value: c

Enter the value : d
d not found.
```

In [ ]:
```

```