In [1]:
```python
1  # Program 1
2  dict={'Father':'Azeem','Mother':'Parween','Brother':'Umer'}
3  print('dict:',dict)
4  dict['Grandfather']='Inam ul Haq'
5  dict['Uncle']='Nadeem'
6  print('Update_dict:',dict)
```

```
dict: {'Father': 'Azeem', 'Mother': 'Parween', 'Brother': 'Umer'}
Update_dict: {'Father': 'Azeem', 'Mother': 'Parween', 'Brother': 'Umer', 'Grand
father': 'Inam ul Haq', 'Uncle': 'Nadeem'}
```

In [2]:
```python
1  # Program 2
2  dict={'Father': '03358947021', 'Mother': '02589976431', 'Brother': '89724061
3       'Grandfather': '89561959591', 'Uncle': '02965978624','Aslam': '033589
4       'Aslam': '03358947021', 'Soban': '02589976431', 'Usman': '89724061944
5       'Salman': '89561959591', 'Haider': '02965978624','Ahsan': '0335894702
6       'Ali': '03358947021'}
7  dict.popitem()
8  print(dict)
9  print(len(dict))
```

```
{'Father': '03358947021', 'Mother': '02589976431', 'Brother': '89724061944', 'G
randfather': '89561959591', 'Uncle': '02965978624', 'Aslam': '03358947021', 'So
ban': '02589976431', 'Usman': '89724061944', 'Salman': '89561959591', 'Haider':
'02965978624', 'Ahsan': '03358947021'}
11
```

In [3]:
```python
1  # Program 3
2  def hexASCII():
3      hexasi = {}
4      for i in range(97,123):
5          hexasi[chr(i)]=['{0:x}'.format(i)]
6      print(hexasi)
7  hexASCII()
```

```
{'a': ['61'], 'b': ['62'], 'c': ['63'], 'd': ['64'], 'e': ['65'], 'f': ['66'],
'g': ['67'], 'h': ['68'], 'i': ['69'], 'j': ['6a'], 'k': ['6b'], 'l': ['6c'],
'm': ['6d'], 'n': ['6e'], 'o': ['6f'], 'p': ['70'], 'q': ['71'], 'r': ['72'],
's': ['73'], 't': ['74'], 'u': ['75'], 'v': ['76'], 'w': ['77'], 'x': ['78'],
'y': ['79'], 'z': ['7a']}
```

In [2]:

```python
# Program 4
myfavort = {'favorite' : ['Pizza','Biryani','Qorma','Nihari','Pilao','Bhindi
cooked = {'mon':'Teenday','tue':'Tori','wed':'Biryani','thurs':'Nihari','fri


cookd = cooked.values()
favorite = myfavort['favorite']
notmade = 0
z = set(cookd)&set(favorite)
print('My Favorite Dishes that has not been made : ',end=(""))
for i in favorite:
    if i not in z :
        print(i,end=(" , "))
        notmade = notmade + 1

print('\nNumber of Dishes made of my choice : ',notmade)
```

```
My Favorite Dishes that has not been made : Qorma , Pilao , Bhindi ,
Number of Dishes made of my choice :  3
```

```python
In [1]:
# Program 5
parentlist = {'Mr Mehmood': ['Ali','Usman','Mr Mehmood','Mrs Mehmood'],
              'Mr Ahmed'  : ['Mr Ahmed','Mrs Ahmed','Eisha','Ghaffar'],
              'Mr Omer'   : ['Mr Omer','Mrs Omer','Ahmed','Pasha'],
              'Mr Basheer' : ['Mr Basheer','Mrs Basheer','Osama','Ahmed'] }

mylist = {'Mr Farhan': ['Osama','Usman','Mr Farhan','Mrs Farhan'],
          'Mr Ahmed'  : ['Mr Ahmed','Mrs Ahmed','Eisha','Ghaffar'],
          'Mr Mujtaba' : ['Mr Mujtaba','Mrs Mujtaba','Ayesha','Umaima'],
          'Mr Basheer' : ['Mr Basheer','Mrs Basheer','Osama','Ahmed']
          }

def totalguest(dic1,dic2):
    count = 0
    totalguest = 0
    guestfamilies = set(mylist)|set(parentlist)

    for i in guestfamilies:
        if i in parentlist:
            guest = parentlist[i]
            totalguest = totalguest + len(guest)
            print("Family of MR {0:12} : {1}".format(i,guest))
        else:
            guest = mylist[i]
            totalguest = totalguest + len(guest)
            print("Family of MR {0:12} : {1}".format(i,guest))

    print('Total Number of families  : ',len(guestfamilies))
    print("Total Number of Guests    : " ,totalguest)
totalguest(parentlist,mylist)
```

```
Family of MR Mr Mujtaba   : ['Mr Mujtaba', 'Mrs Mujtaba', 'Ayesha', 'Umaima']
Family of MR Mr Omer      : ['Mr Omer', 'Mrs Omer', 'Ahmed', 'Pasha']
Family of MR Mr Farhan    : ['Osama', 'Usman', 'Mr Farhan', 'Mrs Farhan']
Family of MR Mr Ahmed     : ['Mr Ahmed', 'Mrs Ahmed', 'Eisha', 'Ghaffar']
Family of MR Mr Mehmood   : ['Ali', 'Usman', 'Mr Mehmood', 'Mrs Mehmood']
Family of MR Mr Basheer   : ['Mr Basheer', 'Mrs Basheer', 'Osama', 'Ahmed']
Total Number of families  :  6
Total Number of Guests    :  24
```

```
In [ ]:
```