

## Updating all methods of the Contacts Application and Saving in a Text File

- Add Contact
- Search for contacts
- List all contacts
- Modify contact
- Remove contact

In [ ]:

In [93]:

```
#Defining Email and Mobile number validators
import re
def ev(email):
    pattern='^[0-9a-z][0-9a-z_.]{4,25}[0-9a-z][@][0-9a-z]{3,18}[.][a-z]{2,4}|^[0-9a-z][0-9a-z_.]{4,13}[0-9a-z][@][0-9a-z]{3,18}[.][a-z]{2,4}[.][a-z]{2,4}$'
    if re.match(pattern,email):
        return True
    return False

def pnv(num):
    pattern= '^([6-9][0-9]{9}$|^[0]([6-9][0-9]{9}$|^[+][9][1]([6-9][0-9]{9}$ '
    if re.match(pattern,str(num)):
        return True
    return False
```

In [ ]:

In [3]:

```
# Function to check if contact already exists
def ContactsData(name):
    filename = 'DataFiles/ContactsList.txt'
    with open(filename, 'r') as f:
        filedata = f.read()
        pattern = name+', '
    return re.search(pattern, filedata)
```

In [ ]:

In [106]:

```
# Function to add contact to contacts text file

import re

def AddContact(name, phone, email):
    # store data as name,phone,email in the contacts file
    filename = 'DataFiles/ContactsList.txt'
    if not ContactsData(name):
        if pnv(phone) and ev(email):
            with open(filename, 'a') as f:
                line = name + ',' + str(phone) + ',' + email + '\n'
                f.write(line)
            print(name, 'added to the Contacts List')
        else:
            print('Invalid Phone number or Email')
            return
    else:
        print(name, 'Already Exists')
    return

AddContact('Anil Peter', 8886785229, 'anilkumar_t@apssdc.in')
AddContact('Mummy', 7032855708, 'mummy143@anil.com')
AddContact('Daddy', 9441448680, 'daddy143@anil.com')
AddContact('John Silva Raju', 7702023300, 'johnsilvarju7@gmail.com')
AddContact('Kiran Babu', 9440137348, 'mavayya143@anil.com')
```

Anil Peter added to the Contacts List  
Mummy added to the Contacts List  
Daddy added to the Contacts List  
John Silva Raju added to the Contacts List  
Kiran Babu added to the Contacts List

In [ ]:

In [42]:

```
#Reading contacts from file
def ReadContact():
    contact=[]
    with open(filename,'r') as f:
        for line in f:
            contact.append(line.split(','))
    return contact
```

In [ ]:

In [107]:

```
#function to search contacts using files
filename='DataFiles/ContactsList.txt'
def SearchContact(name):
    contact=[]
    with open(filename,'r') as f:
        for line in f:
            contact.append(line.split(','))

    for i in range(0,len(contact)):
        if(contact[i][0]==name):
            print("Phone Number: ",contact[i][1],"Email Id: ",contact[i][2]) # Printint
the contact and email in the shell
            c=1
            break
        else: c=0
    if c==0:
        print(name,"contact doesn't exist")

SearchContact("Mummy")
```

Phone Number: 7032855708 Email Id: mummy143@anil.com

In [ ]:

In [62]:

```
def WriteData(filename,Contact):
    with open(filename,'a') as f:
        for lines in Contact:
            readline=', '.join(lines)
            f.writelines(readline)
```

In [ ]:

In [108]:

```
#function to delete contacts using files
filename='DataFiles/ContactsList.txt'
def DeleteContact(name):
    Contact=ReadContact()
    if ContactsData(name):
        for i in range(0,len(Contact)):
            if(Contact[i][0]==name):
                Contact.pop(i)
                break
        WriteData(filename,Contact)
        print(Contact)
    else:
        print("Contact not found to Delete")
def WriteData(filename,Contact):
    with open(filename,'w') as f:
        for lines in Contact:
            readline=','.join(lines)
            f.writelines(readline)
```

```
DeleteContact("Kiran Babu")
```

```
[['Anil Peter', '8886785229', 'anilkumar_t@apssdc.in\n'], ['Mummy', '70328
55708', 'mummy143@anil.com\n'], ['Daddy', '9441448680', 'daddy143@anil.com
\n'], ['John Silva Raju', '7702023300', 'johnsilvarju7@gmail.com\n']]
```

In [ ]:

In [110]:

```
#Modify Contact

filename='DataFiles/ContactsList.txt'

def EdiContact(name,phone,email):
    Contact=ReadContact()
    if ContactsData(name):
        if pnv(phone) and ev(email):
            for i in range(0,len(Contact)):
                if(Contact[i][0]==name):
                    Contact[i][1]=phone;Contact[i][2]=email
                    break
            WriteData(filename,Contact)
        else:
            print("Enter correct Phone number or email")
    else:
        print("Contact not found")
    return

def WriteData(filename,Contact):
    with open(filename,'w') as f:
        for lines in Contact:
            readline=','.join(lines)
            f.writelines(readline)
        print("Sucessfully Contact Modified")
    return
EdiContact("John Silva Raju","7702023300","teegala.johnsilvaraju7@gmail.com")
```

Sucessfully Contact Modified

In [55]:

In [135]:

```
def ShowAllContacts():
    ContactsList=ReadContact()
    for i in range (0,len(ContactsList)):
        print("Name:",ContactsList[i][0],"\n      ""Mobile Number: \t",ContactsList[i][1],
"\n      ", "Email:\t \t",ContactsList[i][2])

ShowAllContacts()
```

```
Name: Anil Peter
      Mobile Number:      8886785229
      Email:              anilkumar_t@apssdc.in

Name: Mummy
      Mobile Number:      7032855708
      Email:              mummy143@anil.com

Name: Daddy
      Mobile Number:      9441448680
      Email:              daddy143@anil.com

Name: John Silva Raju
      Mobile Number:      7702023300
      Email:              teegala.johnsilvaraju7@gmail.com
```

In [ ]:

In [8]:

```
with open("DataFiles/ContactsList.txt",'r') as f:
    for line in f:
        print(line.split())
```

```
['Anil', 'Peter',8886785229,anilkumar_t@apssdc.in']
['Mummy',7032855708,mummy143@anil.com']
['Daddy',9441448680,daddy143@anil.com']
['John', 'Silva', 'Raju',7702023300,teegala.johnsilvaraju7@gmail.com']
```

In [ ]: