In [1]:
```
# student management database


# menu

def menu():
    print('----------------------------------------------------------------')
    print('1. Search a Student')
    print('2. List of Students')
    print('3. Create New Student')
    print('4. Delete Student')
    print('5. View the DataBase')
    print('Enter Your Option')
    print('----------------------------------------------------------------')

    try:
        n=int(input())
    except ValueError:
        print("Please enter a valid input")
        func_loop()

    if n==1:
        print('-----------SEARCH STUDENT-----------------')
        student_search=input("Enter the student name : ")

# reading the csv file
        import pandas as pd
        df=pd.read_csv("D:/project/student database.csv")
        name_list=list(df['NAME'])  # list of names

        if student_search in name_list:
            print('Student {''} is in the database'.format(student_search))
            print(df.iloc[name_list.index(student_search)]) # get index of name in l
        else:
            print(' {} IS NOT FOUND'.format(student_search))

        print('----------------------------------------------------------------')
        func_loop()

    elif n==2:
        print('------------LIST OF STUDENTS---------------')
        import pandas as pd
        df1=pd.read_csv('D:/project/student database.csv')  # reading the csv filw
        name_lst=list(df1['NAME'])  # create a list of names
        for i in name_lst:
            print(i.upper())

        print('----------------------------------------------------------------')
        func_loop()


    elif n==3:
        print('------------CREATE NEW STUDENT--------------')

        new_id=int(input('Enter the Student ID : '))
        import pandas as pd
        df2=pd.read_csv('D:/project/student database.csv')
        check_id=list(df2['STUDENT_ID'])  # create a list of student ID

        if new_id in check_id:  # check given ID is already present
            print(' Student ID {} is already present in database'.format(new_id))
        else:
            new_stu=input('Enter the name : ')
            new_class=int(input('Class in which student studying : '))
```

```
            new_ph=int(input('Enter phone number : '))
            new_mail=input('Enter email ID : ')
            m1=int(input('Enter Physics Mark : '))
            m2=int(input('Enter Chemistry Mark : '))
            m3=int(input('Enter Maths Mark : '))

            import csv
            with open('D:\project\\student database.csv','a',newline="") as File:  #
                writer=csv.writer(File)
                writer.writerow([new_id,new_stu,new_class,new_ph,new_mail,m1,m2,m3])
                print('New Student - {} created'.format(new_stu))
            File.close()

        print('-------------------------------------------------------------')

        func_loop()


    elif n==4:
        print("---------------DELETE STUDENT-----------------")

        import csv
        file=open('D:/project/student database.csv','r')  # open csv  file in read m
        reader=csv.reader(file)
        lst=[]   # list to read the records of the file
        del_name=input('Enter name of student to DELETE : ')
        del_student=False
        for row in reader:  # looping through the records
            if row[1]==del_name:  # if the name matches skip the record
                del_student=True
            else:
                lst.append(row)

        file.close()

        if del_student==False:
            print('Student NOT FOUND')
        else:
            file=open('D:/project/student database.csv','w+',newline="") # open file
            writer=csv.writer(file)
            writer.writerows(lst)   # overwrite the records with values in the list
            print('SUCCESSFULLY REMOVED {}'.format(del_name))
        file.close()

        print('-------------------------------------------------------------')

        func_loop()

    elif n==5:
        print('------------Student DataBase----------------------')

        import pandas as pd
        df4=pd.read_csv('D:/project/student database.csv')
        print(df4)

        print('-------------------------------------------------------------')

        func_loop()


    else:
        print()
        print('Invalid input')
        menu()
```

```
# to repeat the menu option
def func_loop():

    print('enter "1" for menu "0" to exit')
    try:
        n=int(input('Enter 1 or 0 : '))
    except:
        print('Enter 1 or 0 : ')
        func_loop()

    if n==1:
        menu()
    elif n==0:
        print('Exiting database...')
        quit()
    else:
        print("Input not valid")
        func_loop()
```

In [2]:
```
menu()
```

```
------------------------------------------------------------
1. Search a Student
2. List of Students
3. Create New Student
4. Delete Student
5. View the DataBase
Enter Your Option
------------------------------------------------------------
5
------------Student DataBase----------------------
   STUDENT_ID     NAME  CLASS       PHONE                       EMAIL  PHYSICS  \
0         101  sandeep     12  9746390769  sandeepsuresh16@gmail.com       99
1         102     hari     12  9874512536            hari@gmail.com       99
2         105   aswini     12  9876541230          aswini@yahoo.com       87
3         100    meera     12   984576211         meera@hotmail.com       89

   CHEMISTRY  MATHS
0         98     97
1         94     95
2         86     90
3         87     90
------------------------------------------------------------
enter "1" for menu "0" to exit
Enter 1 or 0 : 1
------------------------------------------------------------
1. Search a Student
2. List of Students
3. Create New Student
4. Delete Student
5. View the DataBase
Enter Your Option
------------------------------------------------------------
1
-----------SEARCH STUDENT------------------
Enter the student name : sandra
 sandra IS NOT FOUND
------------------------------------------------------------
enter "1" for menu "0" to exit
Enter 1 or 0 : 1
------------------------------------------------------------
1. Search a Student
2. List of Students
3. Create New Student
```

```
4. Delete Student
5. View the DataBase
Enter Your Option
------------------------------------------------------------
1
-----------SEARCH STUDENT------------------
Enter the student name : sandeep
Student sandeep is in the database
STUDENT_ID                          101
NAME                             sandeep
CLASS                                12
PHONE                        9746390769
EMAIL         sandeepsuresh16@gmail.com
PHYSICS                              99
CHEMISTRY                            98
MATHS                                97
Name: 0, dtype: object
------------------------------------------------------------
enter "1" for menu "0" to exit
Enter 1 or 0 : 1
------------------------------------------------------------
1. Search a Student
2. List of Students
3. Create New Student
4. Delete Student
5. View the DataBase
Enter Your Option
------------------------------------------------------------
3
------------CREATE NEW STUDENT--------------
Enter the Student ID : 101
 Student ID 101 is already present in database
------------------------------------------------------------
enter "1" for menu "0" to exit
Enter 1 or 0 : 1
------------------------------------------------------------
1. Search a Student
2. List of Students
3. Create New Student
4. Delete Student
5. View the DataBase
Enter Your Option
------------------------------------------------------------
3
------------CREATE NEW STUDENT--------------
Enter the Student ID : 106
Enter the name : sandra
Class in which student studying : 12
Enter phone number : 9745864521
Enter email ID : sandra@gmail.com
Enter Physics Mark : 89
Enter Chemistry Mark : 98
Enter Maths Mark : 87
New Student - sandra created
------------------------------------------------------------
enter "1" for menu "0" to exit
Enter 1 or 0 : 1
------------------------------------------------------------
1. Search a Student
2. List of Students
3. Create New Student
4. Delete Student
5. View the DataBase
Enter Your Option
------------------------------------------------------------
2
------------LIST OF STUDENTS---------------
sandeep
hari
```

```
aswini
meera
sandra
------------------------------------------------------------
enter "1" for menu "0" to exit
Enter 1 or 0 : 1
------------------------------------------------------------
1. Search a Student
2. List of Students
3. Create New Student
4. Delete Student
5. View the DataBase
Enter Your Option
------------------------------------------------------------
2
------------LIST OF STUDENTS---------------
sandeep
hari
aswini
meera
sandra
------------------------------------------------------------
enter "1" for menu "0" to exit
Enter 1 or 0 : 1
------------------------------------------------------------
1. Search a Student
2. List of Students
3. Create New Student
4. Delete Student
5. View the DataBase
Enter Your Option
------------------------------------------------------------
4
---------------DELETE STUDENT------------------
Enter name of student to DELETE : sree
Student NOT FOUND
------------------------------------------------------------
enter "1" for menu "0" to exit
Enter 1 or 0 : 1
------------------------------------------------------------
1. Search a Student
2. List of Students
3. Create New Student
4. Delete Student
5. View the DataBase
Enter Your Option
------------------------------------------------------------
1
-----------SEARCH STUDENT------------------
Enter the student name : sandeep
Student sandeep is in the database
STUDENT_ID                          101
NAME                             sandeep
CLASS                                12
PHONE                        9746390769
EMAIL         sandeepsuresh16@gmail.com
PHYSICS                              99
CHEMISTRY                            98
MATHS                                97
Name: 0, dtype: object
------------------------------------------------------------
enter "1" for menu "0" to exit
Enter 1 or 0 : 0
Exiting database...
```

In [2]:
```
menu()
```

```
------------------------------------------------------------
1. Search a Student
```

```
2. List of Students
3. Create New Student
4. Delete Student
5. View the DataBase
Enter Your Option
------------------------------------------------------------
2
------------LIST OF STUDENTS---------------
SANDEEP
HARI
ASWINI
MEERA
SANDRA
------------------------------------------------------------
enter "1" for menu "0" to exit
Enter 1 or 0 : 0
Exiting database...
```

In [ ]: