



INFORMATICS  
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## **Foundation Certificate in Higher Education**

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## **Abstract**

This report briefly explains about the design and develops a program using python to manage student management system.

## **Acknowledgements**

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# **1 Problem and Problem understanding of the Project**

## **1.1 Problem**

Create a console python 3.x program which will allow user to demonstrate a small program for classroom attendance.

## **1.2 Problem understanding**

1. Create a menu with different options and allow user to choose which one user need to be done.
2. Ask for necessary inputs
3. If user inputs an invalid value, then display an error message.
4. After getting inputs that inputs need to store in database system.
5. If user wants to continue, he/she should be able to do so without exiting from the program.
6. When “Exit” option is selected program should terminate.



## 2 Algorithm

- Step1 : Start
- Step2 : Initiate the variables.
- Step3 : Display options to user to choose
- Step4 : Get the user input; user has to select one of option above. If user input invalid value display error message and ask again for valid input.
- Step5 : After choosing which option ask user for inputs to selected option
- Step6 : After getting valid inputs store it in database which base on the system.
- Step7 : Ask user that he/she want to continue the program or want to exit.(Y/N)
- Step8 : If user input “Y” program should run again. If user input “N” program should terminate.

### 3 Python Code

```
import os

import sys

import mysql.connector

# Define variables

option=0

#Menu For The Student Management System

def menu():

# Open database connetion

    conDict={'host':"localhost",

            'database':'student',

            'user':"root",

            'password':''}

    global db

    db=mysql.connector.connect(**conDict)
```

# Print Menu for the user

```
print("|===== Welcome To Student Management System =====|")

print("\nOption 1 : To View Student's List \nOption 2 : To view Attendance List \nOption
3 : To Add New Student detail \nOption 4 : To Delete student detail \nOption 5 : To Update
student detail \nOption 6 : To mark attendance\nOption 7 : To view selected student
attendance")
```

```
userInput=int(input("\nPlease Select An Above Option: "))
```

```
while userInput<1 or userInput>7:
```

```
    print("\n Incorrect option number") #Error Message
```

```
    userInput = int(input("Please Select An Above Option: "))
```

```
# ----- Option 01 ----- #
```

```
if userInput==1:
```

```
    print("\nList of students : ")
```

```
    cursor=db.cursor()
```

```
    cursor.execute("SELECT * FROM student")
```

```
    data=cursor.fetchall()
```

```
    for item in data:
```

```
        print(item)
```

```
    db.close()
```

```
again=input("\nYou want to go back to menu? (Y/N) : ")
```

```

if again=="Y" or "y":

    menu()

else:

    exit()


# ----- Option 02 ----- #

if userInput==2:

    print("\nList of attend students : ")

    cursor=db.cursor()

    cursor.execute("SELECT * FROM student_attend")

    data=cursor.fetchall()

    for item in data:

        print(item)

    db.close()


again=input("\nYou want to go back to menu? (Y/N) : ")

if again=="Y" or "y":

    menu()

else:

    exit()

```

```

# ----- Option 03 ----- #

# Open database connetion

if userInput==3:

    print("\nPlease enter following details")

    cursor=db.cursor()

    # Read user input

    stNo = int(input("\nType student Number: "))

    fName = input("Type first name : " )

    lName = input("type last name : ")

    dob = input("type date of birth : ")

    telephoneNo = int(input("Type telephone number: " ))

    # Execute SQL Query using execute() method

    mySQLText= "INSERT INTO student(stNo,fName,lName,dob,telephoneNo)
VALUES (%s,%s,%s,%s,%s)"

    myValues=(stNo,fName,lName,dob,telephoneNo)

    cursor.execute(mySQLText, myValues)

    # Commit the change

    db.commit()

    print("\nStudent information Added")

    db.close()

    again=input("\nYou want to go back to menu? (Y/N) : ")

    if again=="Y" or "y":

        menu()

```

```

else:

    exit()

# ----- Option 04 ----- #

# Open database connetion

if userInput==4:

    print("\nPlease enter following details")

    cursor=db.cursor()

    stNo=input("\nEnter the student number to be removed :")

    # Execute SQL Query using execute() method

    cursor.execute("DELETE FROM student WHERE stNo="+ stNo +")

    # Commit the change

    db.commit()

    print(cursor.rowcount,"Student information Deleted")

    db.close()

    again=input("\nYou want to go back to menu? (Y/N) : ")

    if again=="Y" or "y":

        menu()

    else:

        exit()

```

```

# ----- Option 05 ----- #

# Open database connetion

if userInput==5:

    global option

    option=input("\nWhich part you want to update?
(stNo,fName,lName,dob,telephoneNo) : ")

    if option=="stNo":

        cursor=db.cursor()

        stNo=input("Type student number: ")

        newstNo=input("Enter new student number: ")

        updTxt="UPDATE student SET stNo=" + newstNo + "WHERE stNo=" + stNo

        cursor.execute(updTxt)

        db.commit()

        print(cursor.rowcount,"Student number Updated")

        db.close()

    elif option=="fName":

        cursor=db.cursor()

        stNo=input("Type student number: ")

        fName=input("Enter student first name: ")

        updTxt="UPDATE student SET fName=" + fName + "WHERE stNo=" + stNo

        cursor.execute(updTxt)

        db.commit()

        print(cursor.rowcount,"Student first name Updated")

        db.close()

```

```

elif option=="lName":

    cursor=db.cursor()

    stNo=input("Type student number: ")

    lName=input("Enter student last name: ")

    updTxt="UPDATE student SET lName='" + lName + "'WHERE stNo=" + stNo

    cursor.execute(updTxt)

    db.commit()

    print(cursor.rowcount,"Student last name Updated")

    db.close()

elif option=="dob":

    cursor=db.cursor()

    stNo=input("Type student number: ")

    dob=input("Enter student date of birth (Year/month/Day): ")

    updTxt="UPDATE student SET dob='" + dob + "'WHERE stNo=" + stNo

    cursor.execute(updTxt)

    db.commit()

    print(cursor.rowcount,"Student Date of birth Updated")

elif option=="telephoneNo":

    cursor=db.cursor()

    stNo=input("Type student number: ")

    telephoneNo=input("Enter student telephone no: ")

    updTxt="UPDATE student SET telephoneNo='" + telephoneNo + "'WHERE stNo="
+ stNo

    cursor.execute(updTxt)

```



```

db.commit()

print(cursor.rowcount,"Student telephone number Updated")

again=input("\nYou want to go back to menu? (Y/N) : ")

if again=="Y" or "y":

    menu()

else:

    exit()


# ----- Option 06 ----- #

# Open database connetion


if userInput==6:

    cursor=db.cursor()

    cursor.execute("SELECT * FROM student")

    data=cursor.fetchall()

    for item in data:

        print(item)

        stNo=input("Type student number: ")

        attendDate=input("Enter date : ")

        attendance=input("Is this student attend? (Yes/No) :")

        # Execute SQL Query using execute() method

        mySQLText="INSERT INTO student_attend(stNo,attendDate,attendance)
VALUES (%s,%s,%s)"

        myValues=(stNo,attendDate,attendance)

        cursor.execute(mySQLText, myValues)

```

```

        # Commit the change

db.commit()

db.close()

again=input("\nYou want to go back to menu? (Y/N) : ")

if again=="Y" or "y":

    menu()

else:

    exit()


# ----- Option 07 ----- #


if userInput==7:

    cursor=db.cursor()

    stNo=input("Enter the student number to find his/her attendance :")

    # Execute SQL Query using execute() method

    cursor.execute("SELECT * FROM student_attend WHERE stNo="+ stNo +"'")

    data=cursor.fetchall()

    print("\nStudent attend detail(stNo,Attend Date,Attendance) :")

    for item in data:

        print(item)

    # Commit the change

    db.commit()

    db.close()

```

```
again=input("\nYou want to go back to menu? (Y/N) : ")
```

```
if again=="Y" or "y":
```

```
    menu()
```

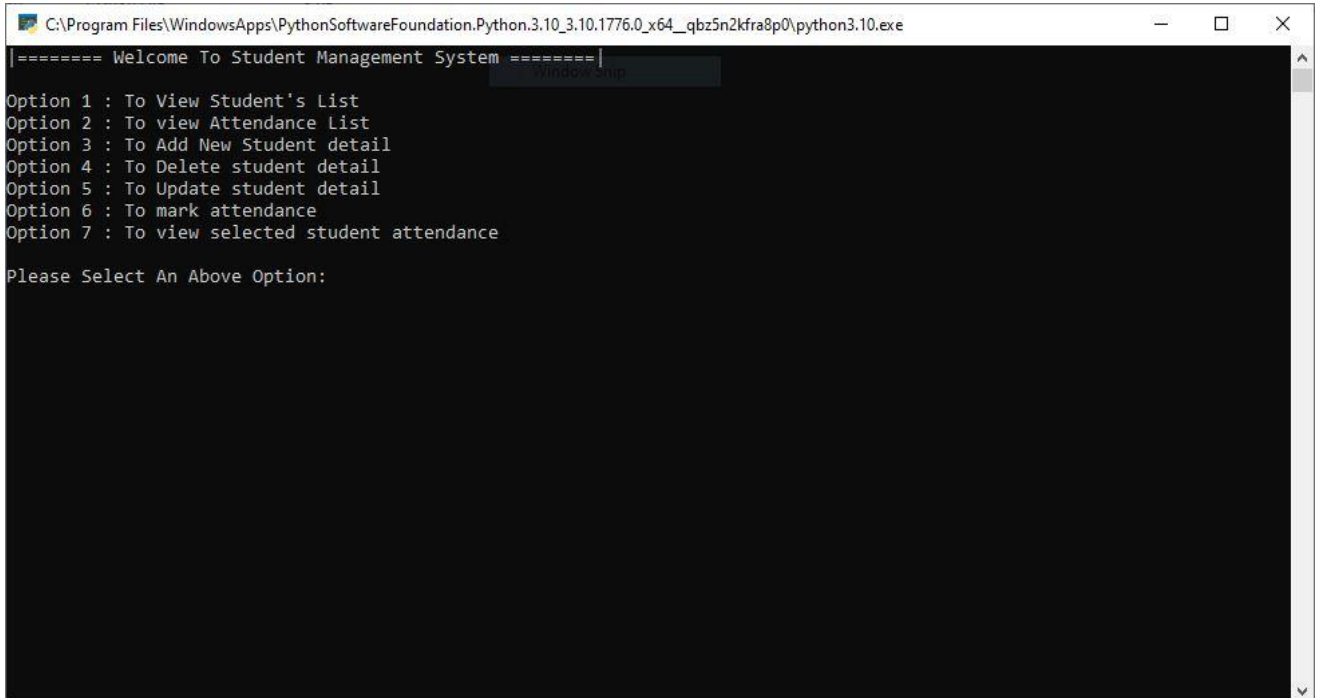
```
else:
```

```
    exit()
```

```
menu()
```

## 4 Screenshots of the program in various states

### 4.1 Menu

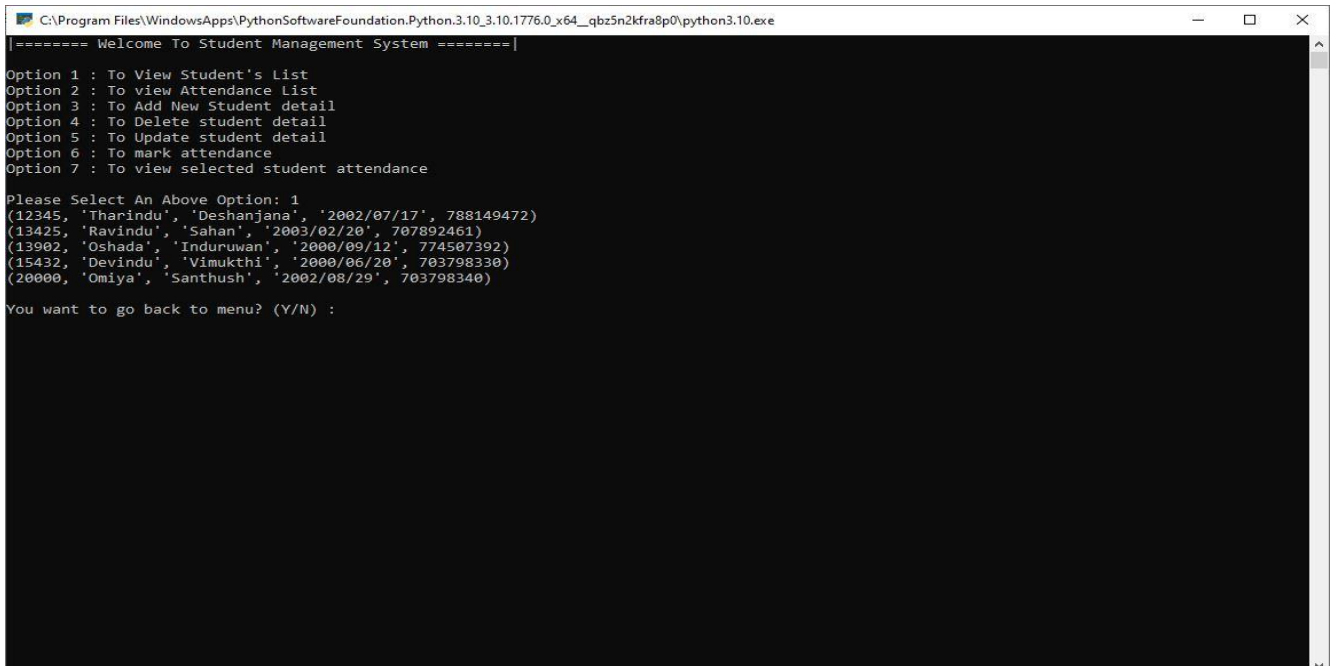


```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64__qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|
Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option:
```

Figure 1 Main menu of program

### 4.2 View student's list



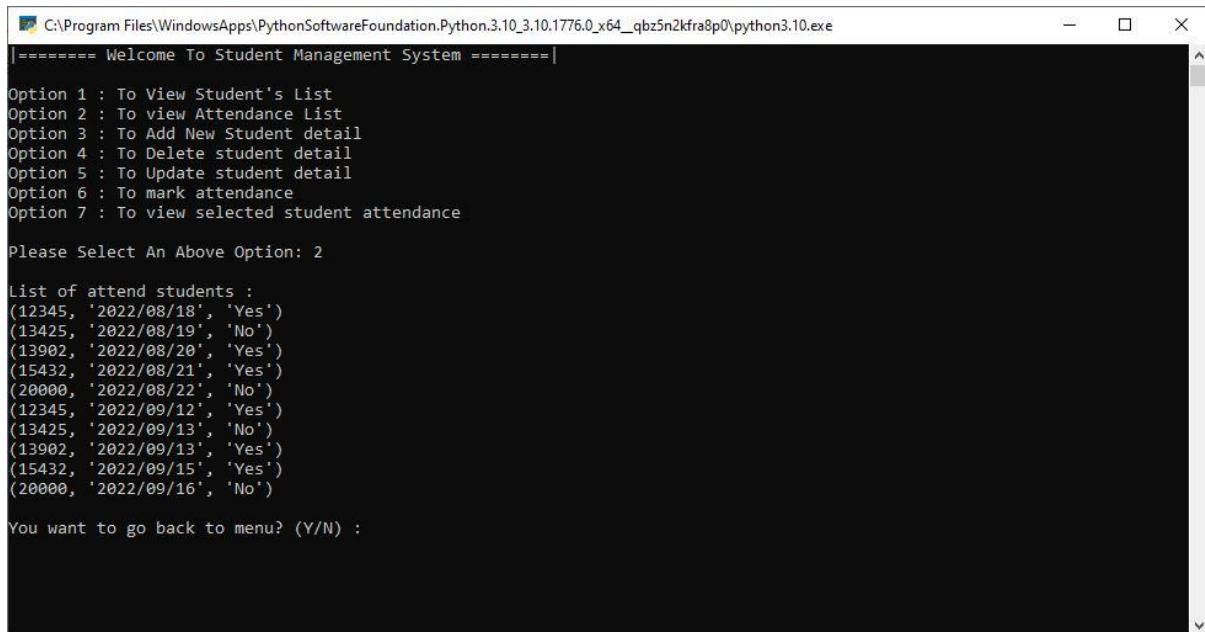
```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64__qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|
Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 1
(12345, 'Tharindu', 'Deshanjana', '2002/07/17', 788149472)
(13425, 'Ravindu', 'Sahan', '2003/02/20', 707892461)
(13902, 'Oshada', 'Induruwan', '2000/09/12', 774507392)
(15432, 'Devindu', 'Vimukthi', '2000/06/20', 703798330)
(20000, 'Omiya', 'Santhush', '2002/08/29', 703798340)

You want to go back to menu? (Y/N) :
```

Figure 2 View student detail

### 4.3 View attendance list



```
===== Welcome To Student Management System =====|
Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 2

List of attend students :
(12345, '2022/08/18', 'Yes')
(13425, '2022/08/19', 'No')
(13902, '2022/08/20', 'Yes')
(15432, '2022/08/21', 'Yes')
(20000, '2022/08/22', 'No')
(12345, '2022/09/12', 'Yes')
(13425, '2022/09/13', 'No')
(13902, '2022/09/13', 'Yes')
(15432, '2022/09/15', 'Yes')
(20000, '2022/09/16', 'No')

You want to go back to menu? (Y/N) :
```

Figure 3 View attendance detail

stNo	attendDate	attendance
12345	2022/08/18	Yes
13425	2022/08/19	No
13902	2022/08/20	Yes
15432	2022/08/21	Yes
20000	2022/08/22	No
12345	2022/09/12	Yes
13425	2022/09/13	No
13902	2022/09/13	Yes
15432	2022/09/15	Yes
20000	2022/09/16	No

Figure 4 Attending list

## 4.4 Adding new student

```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64_qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|
Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 3

Please enter following details

Type student Number: 20198
Type first name : Ruwan
type last name : Chamara
type date of birth : 2002/08/10
Type telephone number: 0789301278

Student information Added

You want to go back to menu? (Y/N) :
```

Figure 5 Adding new student detail

Server: 127.0.0.1 » Database: student » Table: student

Browse

Structure

SQL

Search

Insert

Export

Import

Privileges

Operations

Tracking

Triggers

Showing rows 0 - 5 (6 total, Query took 0.0002 seconds.)

SELECT \* FROM `student`

Profiling

Edit inline

Edit

Explain SQL

Create PHP code

Refresh

Show all

Number of rows: 25

Filter rows: Search this table

Sort by key: None

Extra options

←

→

▼

stNo

fName

lName

dob

telephoneNo

<input type="checkbox"/>				12345	Tharindu	Deshanjana	2002/07/17	788149472
<input type="checkbox"/>				13425	Ravindu	Sahan	2003/02/20	707892461
<input type="checkbox"/>				13902	Oshada	Induruwan	2000/09/12	774507392
<input type="checkbox"/>				15432	Devindu	Vimukthi	2000/06/20	703798330
<input type="checkbox"/>				20000	Omiya	Santhush	2002/08/29	703798340
<input type="checkbox"/>				20198	Ruwan	Chamara	2002/08/10	789301278

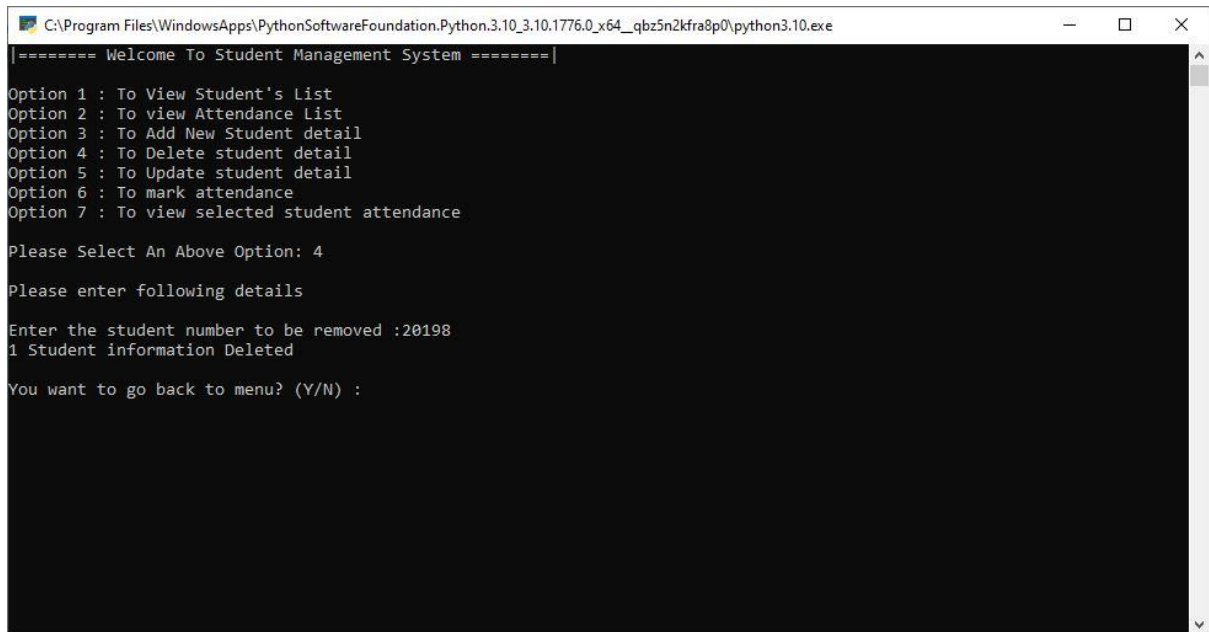
↑

☐ Check all

With selected:

Figure 6 after console command 1

## 4.5 Deleting student detail



```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64__qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|
Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

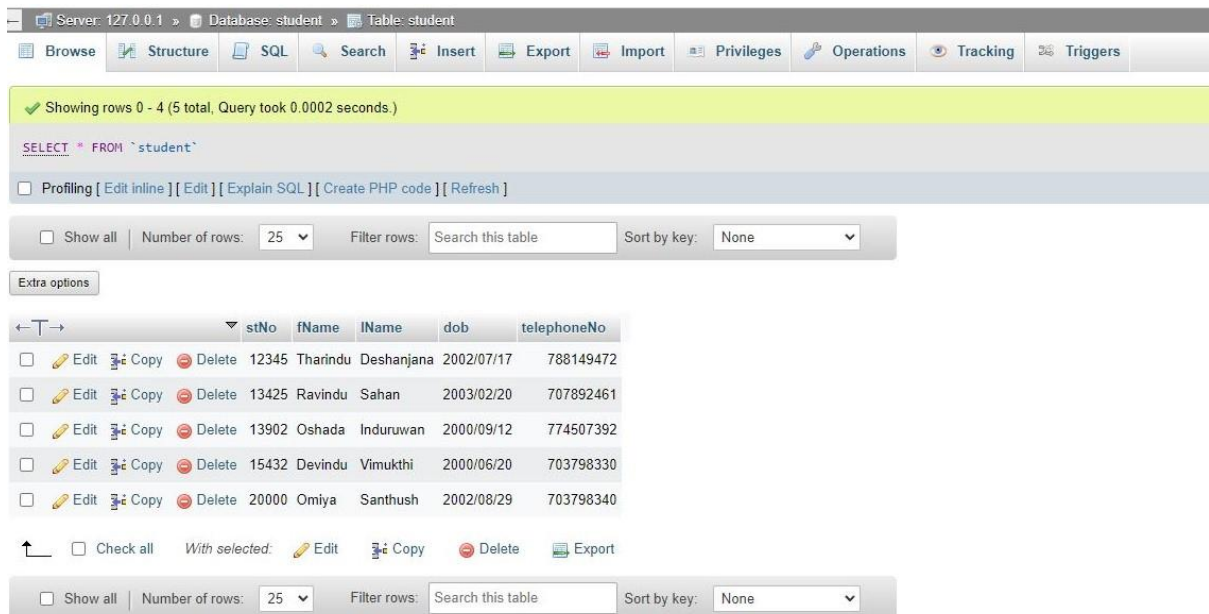
Please Select An Above Option: 4

Please enter following details

Enter the student number to be removed :20198
1 Student information Deleted

You want to go back to menu? (Y/N) :
```

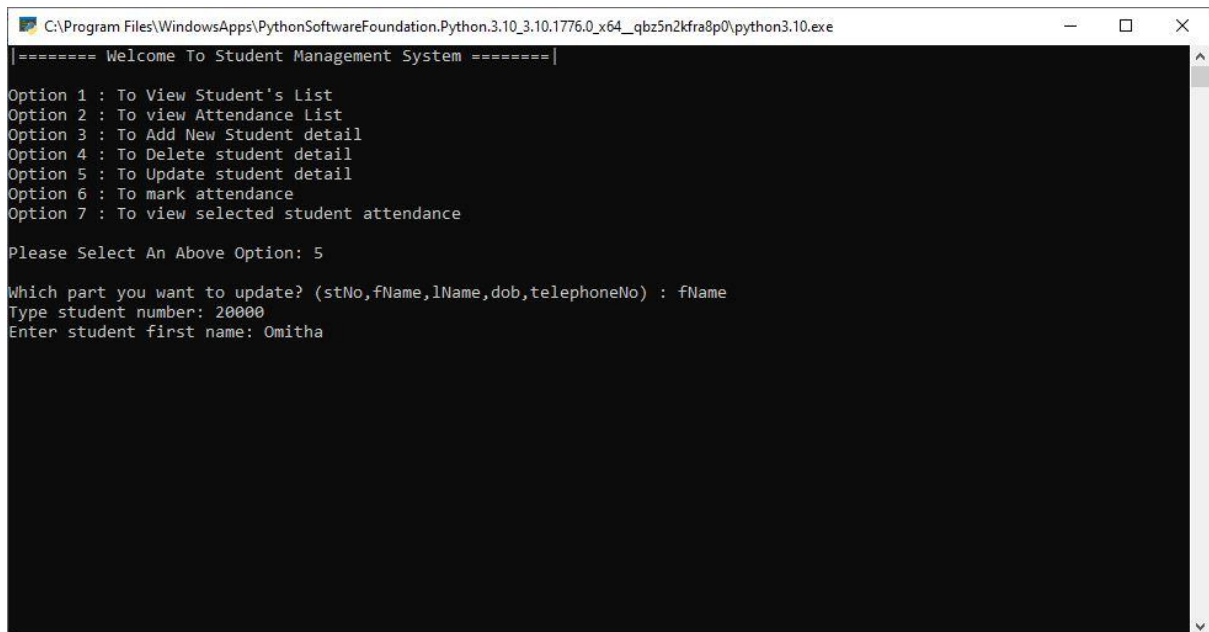
Figure 7 Deleting a student detail



	stNo	fName	lName	dob	telephoneNo
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	12345	Tharindu	Deshanjana	2002/07/17	788149472
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	13425	Ravindu	Sahan	2003/02/20	707892461
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	13902	Oshada	Induruwan	2000/09/12	774507392
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	15432	Devindu	Vimukthi	2000/06/20	703798330
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	20000	Omiya	Santhush	2002/08/29	703798340

Figure 8 After console command 2

## 4.6 Updating student detail

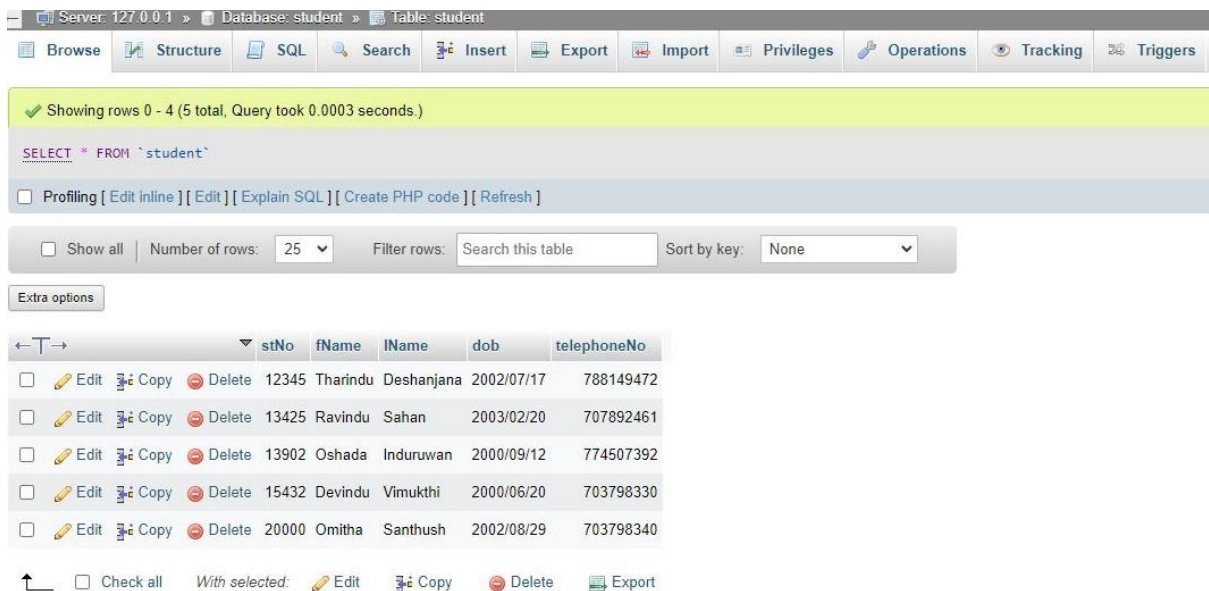


```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64_qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|
Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 5

Which part you want to update? (stNo,fName,lName,dob,telephoneNo) : fName
Type student number: 20000
Enter student first name: Omitha
```

Figure 9 Updating student detail

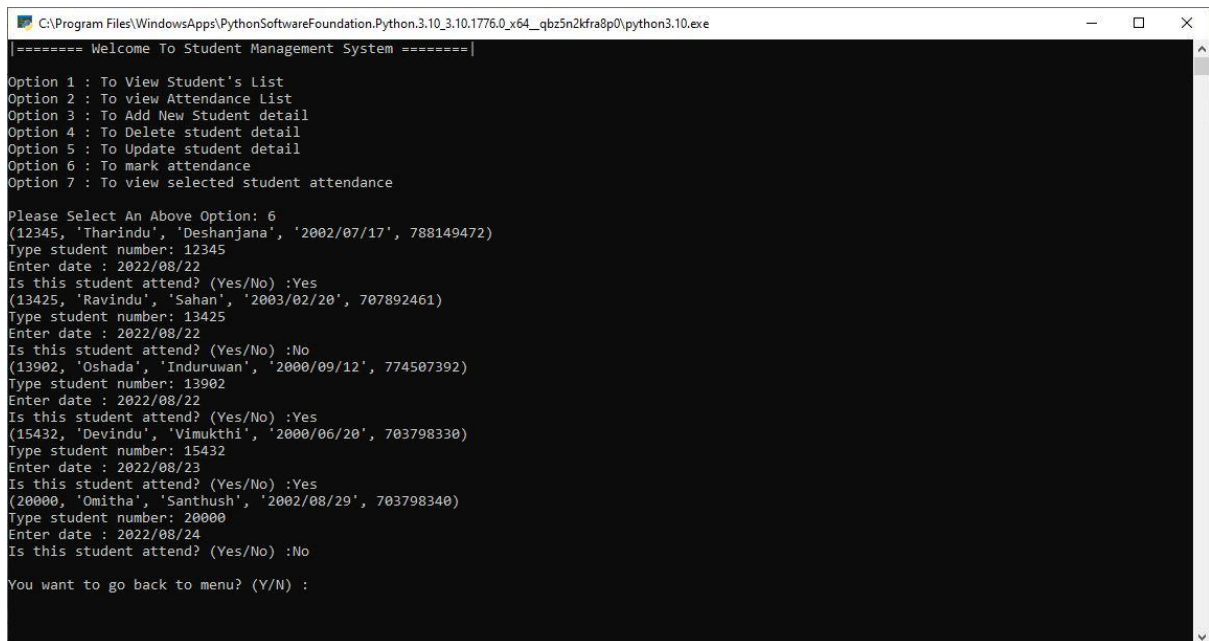


	stNo	fName	lName	dob	telephoneNo
<input type="checkbox"/> Edit Copy Delete	12345	Tharindu	Deshanjana	2002/07/17	788149472
<input type="checkbox"/> Edit Copy Delete	13425	Ravindu	Sahan	2003/02/20	707892461
<input type="checkbox"/> Edit Copy Delete	13902	Oshada	Induruwan	2000/09/12	774507392
<input type="checkbox"/> Edit Copy Delete	15432	Devindu	Vimukthi	2000/06/20	703798330
<input type="checkbox"/> Edit Copy Delete	20000	Omitha	Santhush	2002/08/29	703798340

Figure 10 After console command 3



## 4.7 Marking attendance



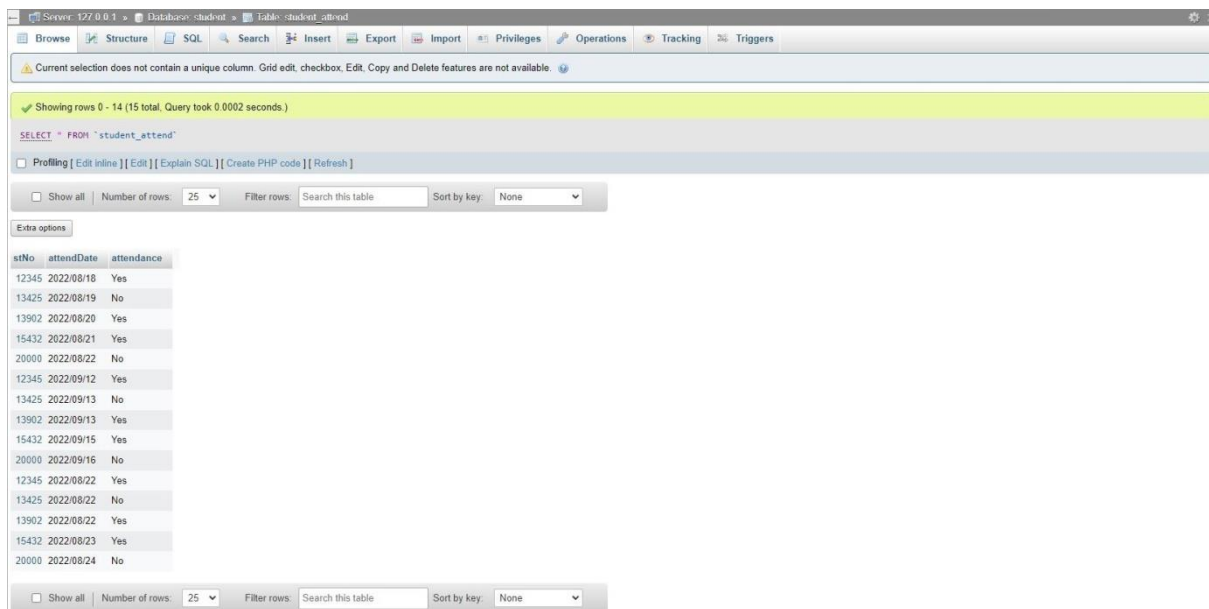
```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64__qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|

Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 6
(12345, 'Tharindu', 'Deshanjana', '2002/07/17', 788149472)
Type student number: 12345
Enter date : 2022/08/22
Is this student attend? (Yes/No) :Yes
(13425, 'Ravindu', 'Sahan', '2003/02/20', 707892461)
Type student number: 13425
Enter date : 2022/08/22
Is this student attend? (Yes/No) :No
(13902, 'Oshada', 'Induruwan', '2000/09/12', 774507392)
Type student number: 13902
Enter date : 2022/08/22
Is this student attend? (Yes/No) :Yes
(15432, 'Devindu', 'Vimukthi', '2000/06/20', 703798330)
Type student number: 15432
Enter date : 2022/08/23
Is this student attend? (Yes/No) :Yes
(20000, 'Omitha', 'Santhush', '2002/08/29', 703798340)
Type student number: 20000
Enter date : 2022/08/24
Is this student attend? (Yes/No) :No

You want to go back to menu? (Y/N) :
```

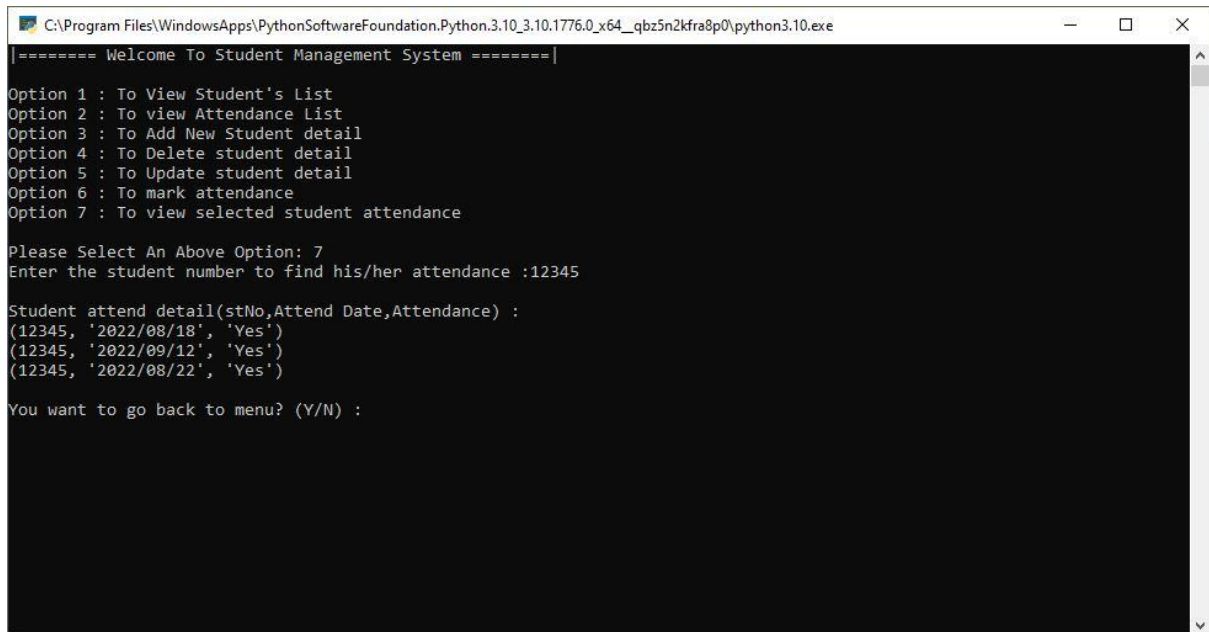
Figure 11 Marking attendance



stNo	attendDate	attendance
12345	2022/08/18	Yes
13425	2022/08/19	No
13902	2022/08/20	Yes
15432	2022/08/21	Yes
20000	2022/08/22	No
12345	2022/09/12	Yes
13425	2022/09/13	No
13902	2022/09/13	Yes
15432	2022/09/15	Yes
20000	2022/09/16	No
12345	2022/08/22	Yes
13425	2022/08/22	No
13902	2022/08/22	Yes
15432	2022/08/23	Yes
20000	2022/08/24	No

Figure 12 After console commands 4

## 4.8 View selected student attendance



```
===== Welcome To Student Management System =====|
Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 7
Enter the student number to find his/her attendance :12345

Student attend detail(stNo,Attend Date,Attendance) :
(12345, '2022/08/18', 'Yes')
(12345, '2022/09/12', 'Yes')
(12345, '2022/08/22', 'Yes')

You want to go back to menu? (Y/N) :
```

Figure 13 View selected student attendance

## 5 Test Case Table

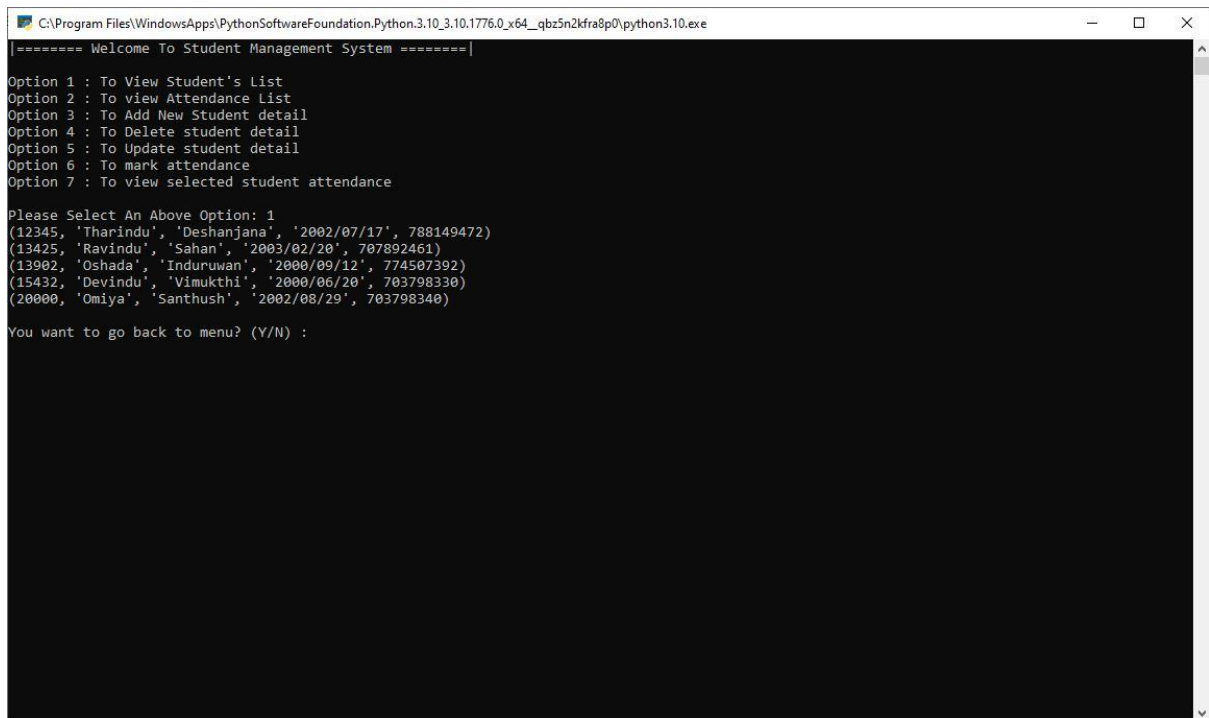
Test Case	Input	Expected Output	Actual Output	Remarks
1	Input “1”	Display student’s list	Display student’s list	Test Pass
2	Input “2”	Display attendance list	Display attendance list	Test Pass
3	Input “3”, student number, First name, Last name, date of birth, telephone number	Store following user inputs in database	User input data stored successfully	Test Pass
4	Input “4”,input student number	Delete data from database according to the user input	Delete data from database according to the user input	Test Pass
5	Input “5”, input “fName” ,stNo and new fName	New First name of following students should be update	First name updated	Test Pass
6	Input “5”, input “lName” ,stNo and new lName	New Last name of following students should be update	Last name updated	Test Pass
7	Input “5”, input “dob” ,stNo and new date of birth	New Date of birth of following students should be update	Date of birth updated	Test Pass
8	Input “5”, input “tekephoneNo” ,stNo and new telephone number	New telephone number of following students should be update	Telephone number updated	Test Pass

9	Input “6”, student number, date, attendance	stNo,date and attendance should be store in attendance table	Following data stored in attendance table	Test Pass
10	Input “7” and student number	Attendance detail of entered stNo should be display	Display attendance details	Test Pass
11	Input “Y” to run program again	Program should run again	Program run again	Test Pass

**Table 1 Test cases**

## 6 Screenshots of test cases

### 6.1 Display student's list (Test case 01)



```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64__qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|

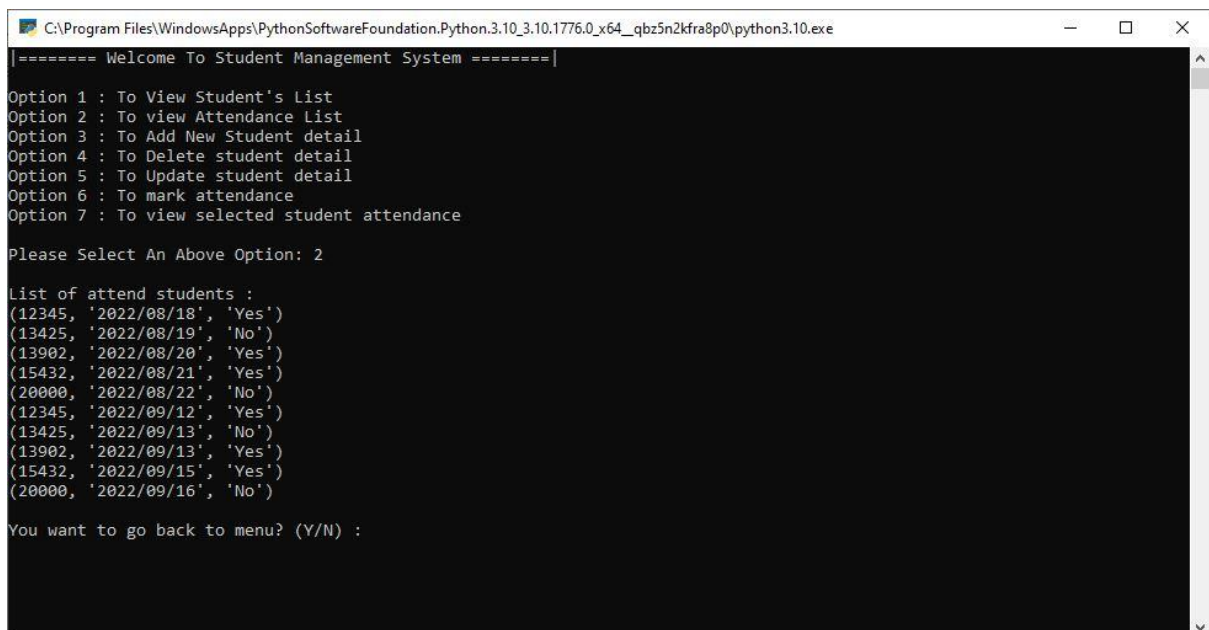
Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 1
(12345, 'Tharindu', 'Deshanjana', '2002/07/17', 788149472)
(13425, 'Ravindu', 'Sahan', '2003/02/20', 707892461)
(13902, 'Oshada', 'Induruwan', '2000/09/12', 774507392)
(15432, 'Devindu', 'Vimukthi', '2000/06/20', 703798330)
(20000, 'Omiya', 'Santhush', '2002/08/29', 703798340)

You want to go back to menu? (Y/N) :
```

Figure 14 Test case 01 input

### 6.2 Display attendance list (Test case 02)



```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64__qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|

Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 2

List of attend students :
(12345, '2022/08/18', 'Yes')
(13425, '2022/08/19', 'No')
(13902, '2022/08/20', 'Yes')
(15432, '2022/08/21', 'Yes')
(20000, '2022/08/22', 'No')
(12345, '2022/09/12', 'Yes')
(13425, '2022/09/13', 'No')
(13902, '2022/09/13', 'Yes')
(15432, '2022/09/15', 'Yes')
(20000, '2022/09/16', 'No')

You want to go back to menu? (Y/N) :
```

Figure 15 Test case 02 input

### 6.3 Store new student details (Test case 03)

```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64_qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|
Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 3

Please enter following details

Type student Number: 20198
Type first name : Ruwan
type last name : Chamara
type date of birth : 2002/08/10
Type telephone number: 0789301278

Student information Added

You want to go back to menu? (Y/N) :
```

Figure 16 Test case 03 input

Server: 127.0.0.1 » Database: student » Table: student

Browse

Structure

SQL

Search

Insert

Export

Import

Privileges

Operations

Tracking

Triggers

Showing rows 0 - 5 (6 total, Query took 0.0002 seconds.)

SELECT \* FROM `student`

Profiling

Edit inline

Edit

Explain SQL

Create PHP code

Refresh

Show all

Number of rows: 25

Filter rows: Search this table

Sort by key: None

Extra options

← T →

stNo

fName

lName

dob

telephoneNo

☐

Edit

Copy

Delete

12345

Tharindu

Deshanjana

2002/07/17

788149472

☐

Edit

Copy

Delete

13425

Ravindu

Sahan

2003/02/20

707892461

☐

Edit

Copy

Delete

13902

Oshada

Induruwan

2000/09/12

774507392

☐

Edit

Copy

Delete

15432

Devindu

Vimukthi

2000/06/20

703798330

☐

Edit

Copy

Delete

20000

Omiya

Santhush

2002/08/29

703798340

☐

Edit

Copy

Delete

20198

Ruwan

Chamara

2002/08/10

789301278

☐ Check all

With selected:

Edit

Copy

Delete

Export

Figure 17 Test case 03 output

## 6.4 Delete data from database (Test case 04)

```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64_qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|
Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

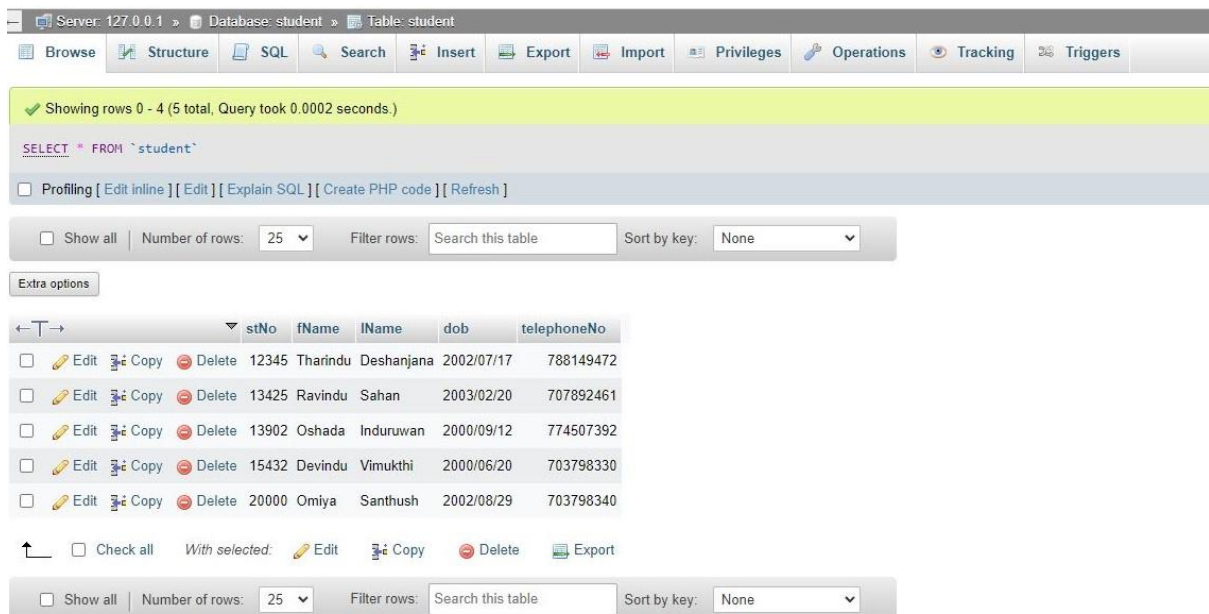
Please Select An Above Option: 4

Please enter following details

Enter the student number to be removed :20198
1 Student information Deleted

You want to go back to menu? (Y/N) :
```

Figure 18 Test case 04 input



Server: 127.0.0.1 » Database: student » Table: student

Showing rows 0 - 4 (5 total, Query took 0.0002 seconds.)

SELECT \* FROM `student`

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

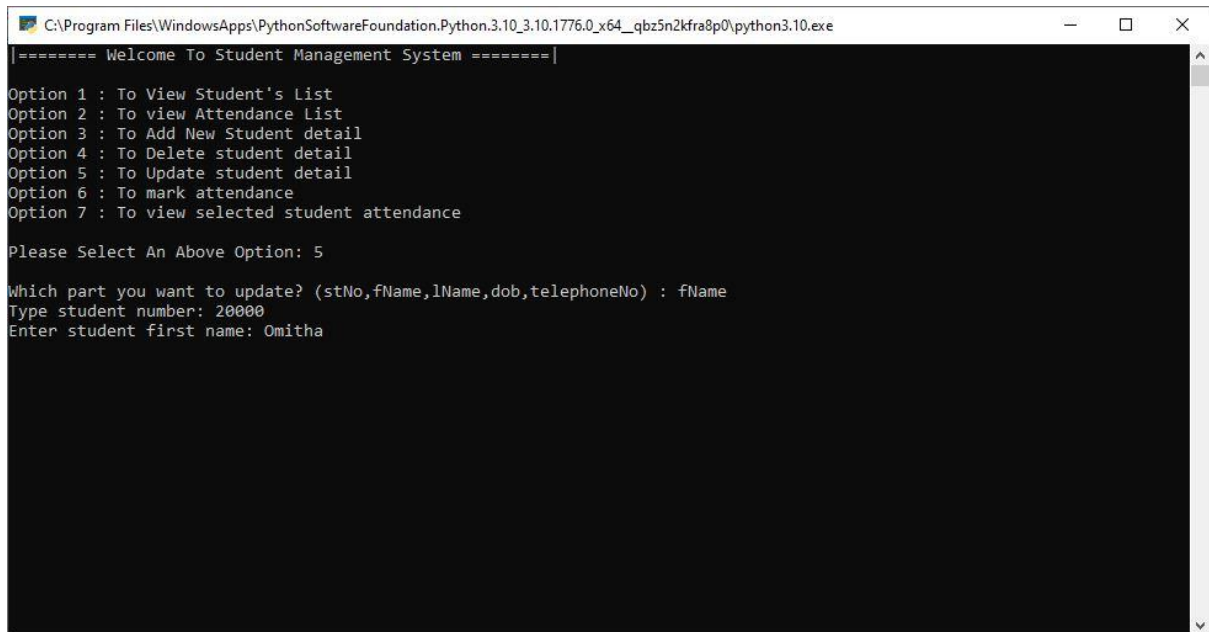
	stNo	fName	lName	dob	telephoneNo
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	12345	Tharindu	Deshanjana	2002/07/17	788149472
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	13425	Ravindu	Sahan	2003/02/20	707892461
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	13902	Oshada	Induruwan	2000/09/12	774507392
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	15432	Devindu	Vimukthi	2000/06/20	703798330
<input type="checkbox"/> Edit <input type="checkbox"/> Copy <input type="checkbox"/> Delete	20000	Omiya	Santhush	2002/08/29	703798340

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

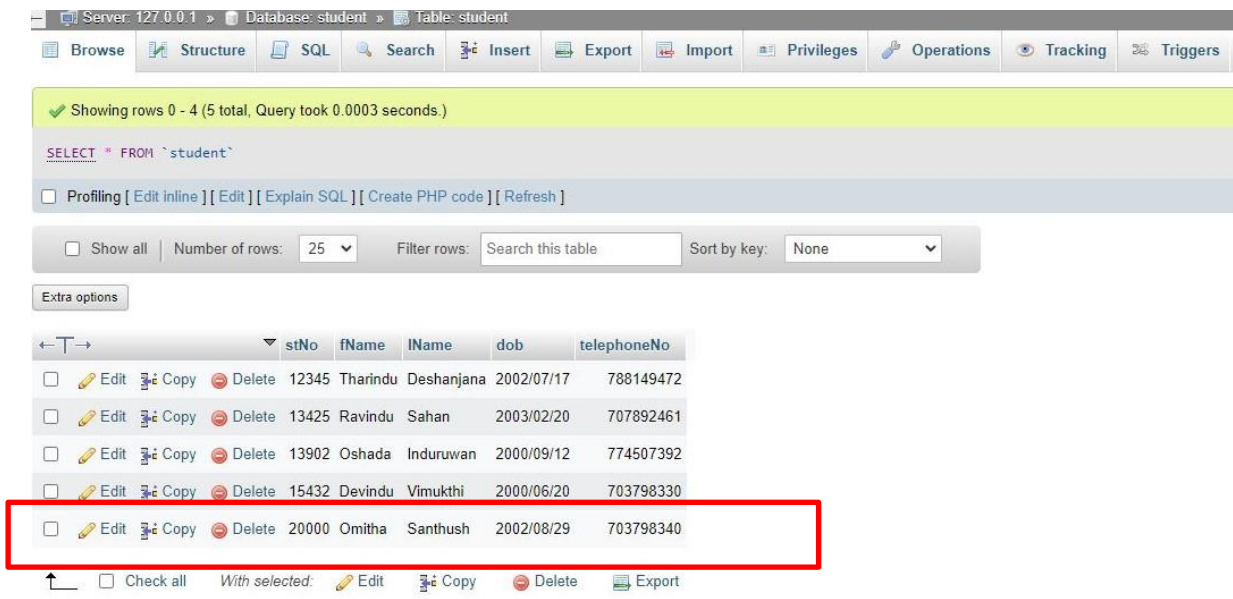
Figure 19 Test case 04 output

## 6.5 Updating first name of a student (Test case 05)



```
===== Welcome To Student Management System =====  
Option 1 : To View Student's List  
Option 2 : To view Attendance List  
Option 3 : To Add New Student detail  
Option 4 : To Delete student detail  
Option 5 : To Update student detail  
Option 6 : To mark attendance  
Option 7 : To view selected student attendance  
  
Please Select An Above Option: 5  
  
Which part you want to update? (stNo,fName,lName,dob,telephoneNo) : fName  
Type student number: 20000  
Enter student first name: Omitha
```

Figure 20 Test case 05 input

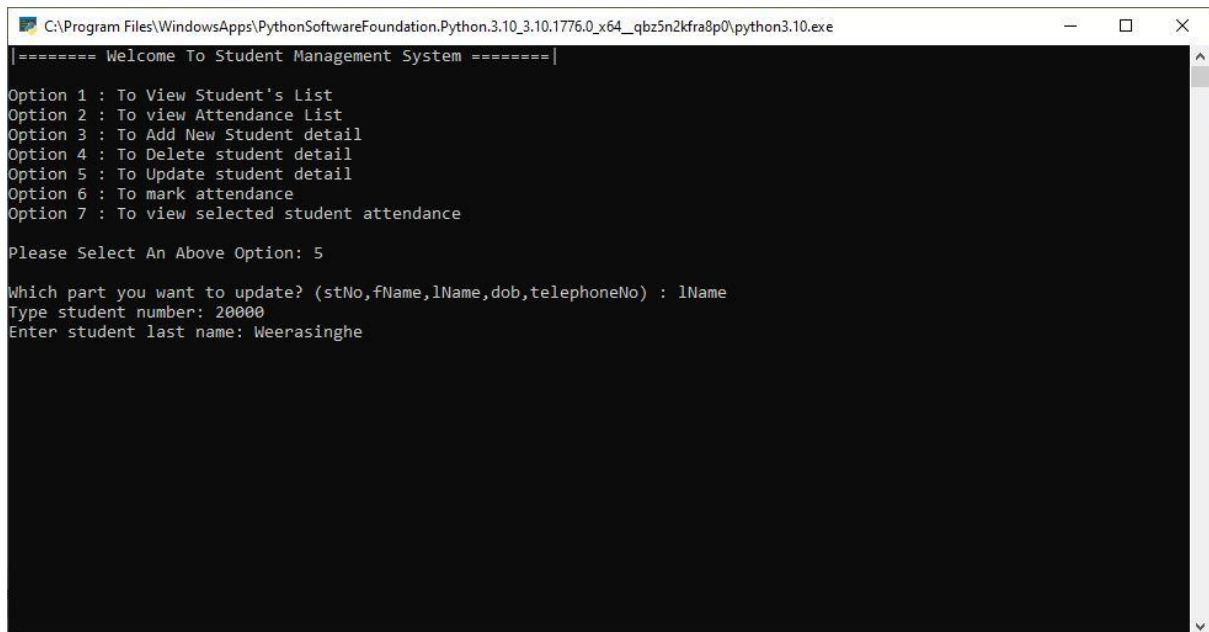


stNo	fName	lName	dob	telephoneNo
12345	Tharindu	Deshanjana	2002/07/17	788149472
13425	Ravindu	Sahan	2003/02/20	707892461
13902	Oshada	Induruwan	2000/09/12	774507392
15432	Devindu	Vimukthi	2000/06/20	703798330
20000	Omitha	Santhush	2002/08/29	703798340

Figure 21 Test case 05 output



## 6.6 Updating last name of a student (Test case 06)



```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64_qbz5n2kfra8p0\python3.10.exe

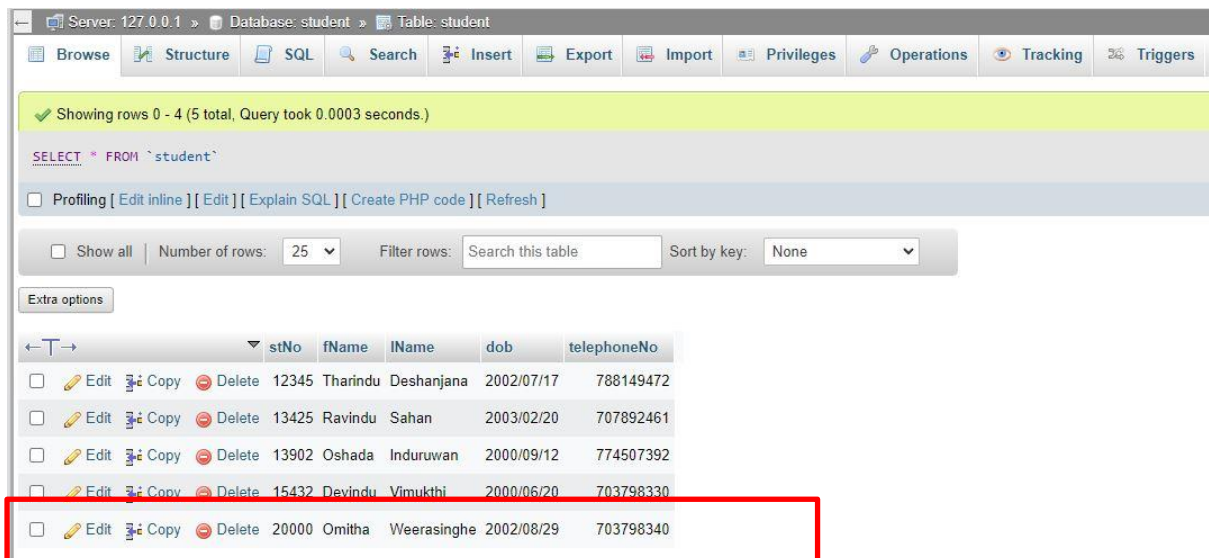
|===== Welcome To Student Management System =====|

Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 5

Which part you want to update? (stNo,fName,lName,dob,telephoneNo) : lName
Type student number: 20000
Enter student last name: Weerasinghe
```

Figure 22 Test case 06 input



Server: 127.0.0.1 » Database: student » Table: student

Showing rows 0 - 4 (5 total, Query took 0.0003 seconds.)

`SELECT * FROM `student``

Number of rows: 25 Filter rows: Search this table Sort by key: None

	stNo	fName	lName	dob	telephoneNo
<input type="checkbox"/> Edit Copy Delete	12345	Tharindu	Deshanjana	2002/07/17	788149472
<input type="checkbox"/> Edit Copy Delete	13425	Ravindu	Sahan	2003/02/20	707892461
<input type="checkbox"/> Edit Copy Delete	13902	Oshada	Induruwan	2000/09/12	774507392
<input type="checkbox"/> Edit Copy Delete	15432	Devindu	Vimukthi	2000/06/20	703798330
<input type="checkbox"/> Edit Copy Delete	20000	Omitha	Weerasinghe	2002/08/29	703798340

Figure 23 Test case 06 output

## 6.7 Updating date of birth of a student (Test case 07)

```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64__qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|
Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 5

Which part you want to update? (stNo,fName,lName,dob,telephoneNo) : dob
Type student number: 20000
Enter student date of birth (Year/month/Day): 2000/03/21
```

Figure 24 Test case 07 input

Server: 127.0.0.1 » Database: student » Table: student

Showing rows 0 - 4 (5 total, Query took 0.0002 seconds.)

SELECT \* FROM `student`

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	stNo	fName	lName	dob	telephoneNo
<input type="checkbox"/> Edit Copy Delete	12345	Tharindu	Deshanjana	2002/07/17	788149472
<input type="checkbox"/> Edit Copy Delete	13425	Ravindu	Sahan	2003/02/20	707892461
<input type="checkbox"/> Edit Copy Delete	13902	Oshada	Induruwan	2000/09/12	774507392
<input type="checkbox"/> Edit Copy Delete	15432	Devindu	Vimukthi	2000/06/20	703798330
<input type="checkbox"/> Edit Copy Delete	20000	Omitha	Weerasinghe	2000/03/21	703798340

Figure 25 Test case 07 output

## 6.8 Updating telephone number of a student (Test case 08)

```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64_qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|
Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 5

Which part you want to update? (stNo,fName,lName,dob,telephoneNo) : telephoneNo
Type student number: 20000
Enter student telephone no: 0772003000
1 Student telephone number Updated

You want to go back to menu? (Y/N) :
```

Figure 26 Test case 08 input

Server: 127.0.0.1 » Database: student » Table: student

Showing rows 0 - 4 (5 total, Query took 0.0002 seconds.)

SELECT \* FROM `student`

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

	stNo	fName	lName	dob	telephoneNo
<input type="checkbox"/> Edit Copy Delete	12345	Tharindu	Deshanjana	2002/07/17	788149472
<input type="checkbox"/> Edit Copy Delete	13425	Ravindu	Sahan	2003/02/20	707892461
<input type="checkbox"/> Edit Copy Delete	13902	Oshada	Induruwan	2000/09/12	774507392
<input type="checkbox"/> Edit Copy Delete	15432	Devindu	Vimukthi	2000/06/20	703798330
<input type="checkbox"/> Edit Copy Delete	20000	Omitha	Weerasinghe	2000/03/21	772003000

Figure 27 Test case 08 output

## 6.9 Marking attendance of students (Test case 09)

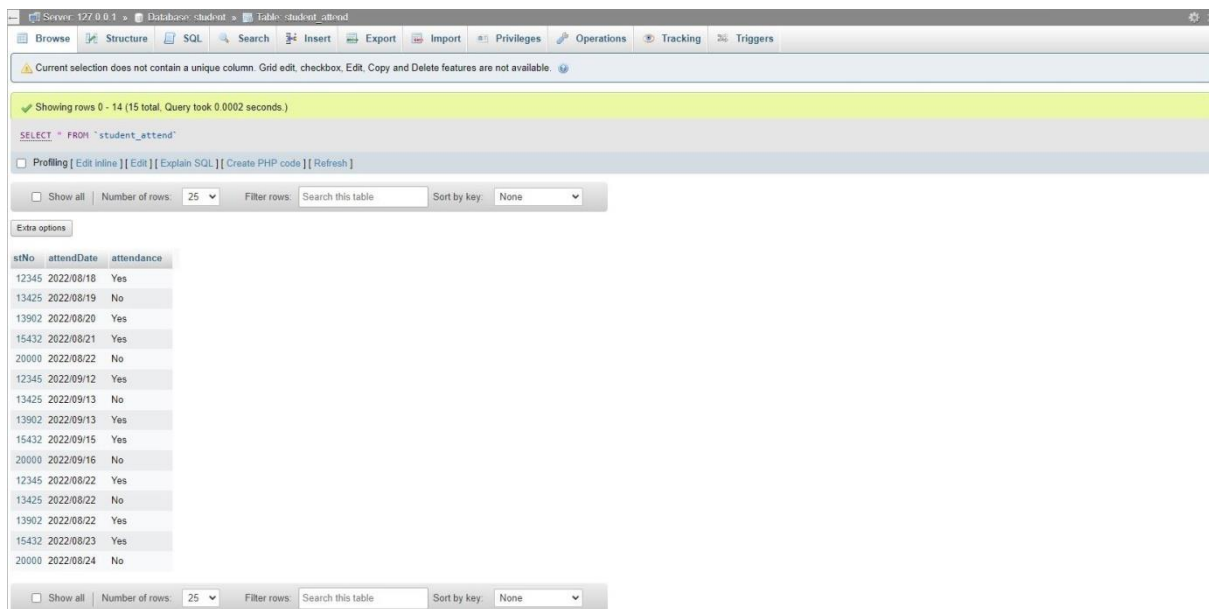
```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10.3.10.1776.0_x64_qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|

Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 6
(12345, 'Tharindu', 'Deshanjana', '2002/07/17', 788149472)
Type student number: 12345
Enter date : 2022/08/22
Is this student attend? (Yes/No) :Yes
(13425, 'Ravindu', 'Sahan', '2003/02/20', 707892461)
Type student number: 13425
Enter date : 2022/08/22
Is this student attend? (Yes/No) :No
(13902, 'Oshada', 'Induruwan', '2000/09/12', 774507392)
Type student number: 13902
Enter date : 2022/08/22
Is this student attend? (Yes/No) :Yes
(15432, 'Devindu', 'Vimukthi', '2000/06/20', 703798330)
Type student number: 15432
Enter date : 2022/08/23
Is this student attend? (Yes/No) :Yes
(20000, 'Omitha', 'Santhush', '2002/08/29', 703798340)
Type student number: 20000
Enter date : 2022/08/24
Is this student attend? (Yes/No) :No

You want to go back to menu? (Y/N) :
```

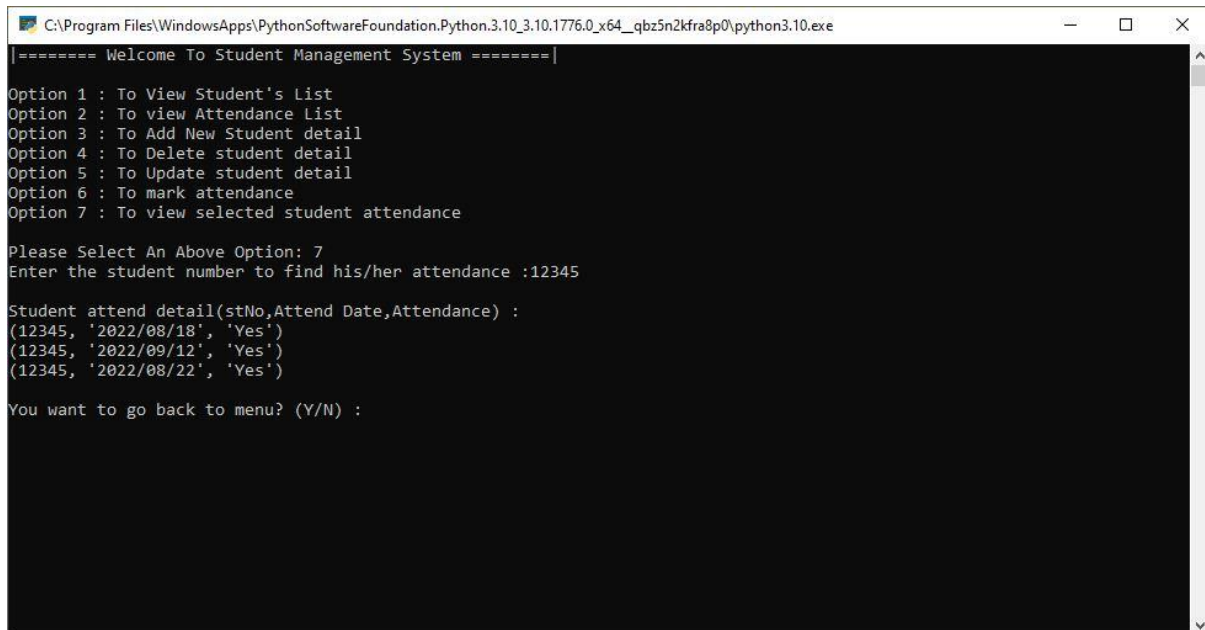
Figure 28 Test case 09 input



stNo	attendDate	attendance
12345	2022/08/18	Yes
13425	2022/08/19	No
13902	2022/08/20	Yes
15432	2022/08/21	Yes
20000	2022/08/22	No
12345	2022/09/12	Yes
13425	2022/09/13	No
13902	2022/09/13	Yes
15432	2022/09/15	Yes
20000	2022/09/16	No
12345	2022/08/22	Yes
13425	2022/08/22	No
13902	2022/08/22	Yes
15432	2022/08/23	Yes
20000	2022/08/24	No

Figure 29 Test case 09 output

## 6.10 View attendance list of a selected student (Test case 10)



```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64_qbz5n2kfra8p0\python3.10.exe
|===== Welcome To Student Management System =====|

Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

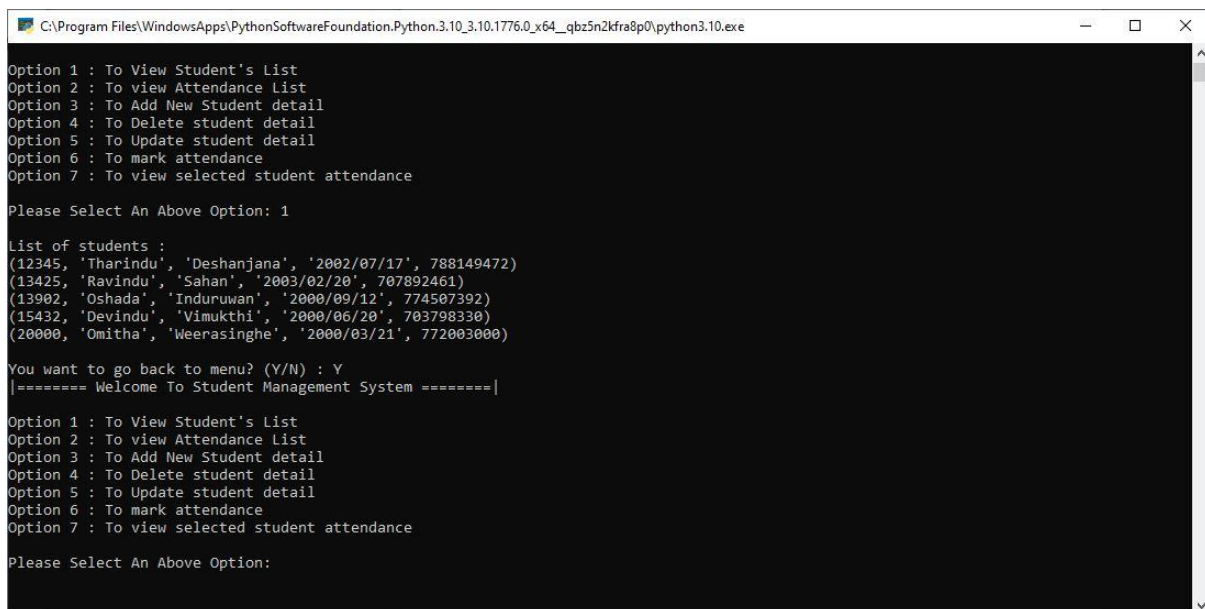
Please Select An Above Option: 7
Enter the student number to find his/her attendance :12345

Student attend detail(stNo,Attend Date,Attendance) :
(12345, '2022/08/18', 'Yes')
(12345, '2022/09/12', 'Yes')
(12345, '2022/08/22', 'Yes')

You want to go back to menu? (Y/N) :
```

Figure 30 Test case 10 input

## 6.11 Run program again (Test case 11)



```
C:\Program Files\WindowsApps\PythonSoftwareFoundation.Python.3.10_3.10.1776.0_x64_qbz5n2kfra8p0\python3.10.exe

Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option: 1

List of students :
(12345, 'Tharindu', 'Deshanjana', '2002/07/17', 788149472)
(13425, 'Ravindu', 'Sahan', '2003/02/20', 707892461)
(13902, 'Oshada', 'Induruwan', '2000/09/12', 774507392)
(15432, 'Devindu', 'Vimukthi', '2000/06/20', 703798330)
(20000, 'Omitha', 'Weerasinghe', '2000/03/21', 772003000)

You want to go back to menu? (Y/N) : Y
|===== Welcome To Student Management System =====|

Option 1 : To View Student's List
Option 2 : To view Attendance List
Option 3 : To Add New Student detail
Option 4 : To Delete student detail
Option 5 : To Update student detail
Option 6 : To mark attendance
Option 7 : To view selected student attendance

Please Select An Above Option:
```

Figure 31 Test case 11