

Baleram Brijbhushan Saraswati Shishu Mandir Inter College Meerut



Session: 2023-2024

Project Synopsis
On
"Student Management System"

Submitted To :

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Submitted By :

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Class : XII (PCM)
Roll No : 38 and 39
Subject : Computer Science
(083)
Session : 2023-24

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Acknowledgement

I would like to express my special thanks of gratitude to my teacher(Mr. Pradeep Kumar Rastogi) as well as our principal (Mr. Krishna Kumar Sharma), who gave me the golden opportunity to do this wonderful project on the topic (Student Management System), which also helped me in doing a lot of Research and I came to know about so many new things I am really thankful to them.

Secondly, I would also like to thank my parents and friends who helped me a lot in finalizing this project with the limited time frame.

Last but not least, I would like to thank all those who had helped(directly or indirectly) towards the completion of this project.

Aditya Sharma and Udarendra Kumar Parashar

Class- XII (PCM)

Certificate

This is to certify that the project entitled “Student Management System” is a genuine work done by Aditya Sharma and Udarendra Kumar Parashar of Class- XII (PCM), Session 2023-2024 in the partial fulfilment of CBSE AISSCE Examination, 2024 and has been carried out under my direct supervision and guidance.

Pseudo code for the creating Database

```
FUNCTION connect_to_database():
```

```
    TRY
```

```
        connection = MySQLConnect(  
            host='localhost',  
            user='root',  
            passwd='12345678'
```

```
        )
```

```
        RETURN connection
```

```
    EXCEPT MySQLError AS error
```

```
        PRINT "Error: " + error
```

```
        RETURN None
```

```
TRY
```

```
    connection = connect_to_database()
```

```
    IF connection is None
```

```
        # Handle the error or exit the program
```

```
        PASS
```

```
    cursor = connection.cursor()
```

```
EXCEPT MySQLError AS error
```

```
    PRINT "Error: " + error
```

```
    # Handle the error or exit the program
```

```
TRY
```

```
    # Creating Database
```

```
    cursor.execute("CREATE DATABASE Class_12")
```

```
    cursor.execute("USE Class_12")
```

```
    cursor.execute("""
```

```
        CREATE TABLE Students (
```

```
            Rollno INT PRIMARY KEY,
```

```
            Name VARCHAR(20),
```

```
            DOB DATE,
```

```
            Father_name VARCHAR(20),
```

```
            Mother_name VARCHAR(20),
```

```
            Contact_number BIGINT,
```

```

        Course VARCHAR(10),
        Present_days INT,
        Absent_days INT,
        Percentage_Attendance INT
    )
    """)

cursor.execute("""
    INSERT INTO Students (Rollno, Name, DOB, Father_name, Mother_name,
Contact_number, Course, Present_days, Absent_days)
    VALUES
    (1, 'Rohan', '2006-01-15', 'XYZ', 'XZY', 8178019905, 'PCM', 90, 10),
    (2, 'Atul', '2006-10-23', 'ABC', 'CBA', 8755365623, 'PCM', 88, 12),
    (3, 'Uday', '2006-07-17', 'UVW', 'WVU', 9520507815, 'PCM', 95, 5);
    """)

cursor.execute("""
    UPDATE Students
    SET Percentage_Attendance = (Present_days / (Present_days + Absent_days)) *
100
    """)

connection.commit()
EXCEPT MySQLError AS error
    PRINT "Error: " + error
    # Handle the error or exit the program

```

Pseudo code for the Main Project

```
FUNCTION connect_to_database():
```

```
    TRY
```

```
        connection = MySQLConnect(  
            host='localhost',  
            user='root',  
            passwd='12345678',  
            database='Class_12'  
        )
```

```
        RETURN connection
```

```
    EXCEPT MySQLError AS error
```

```
        PRINT "Error: " + error
```

```
        RETURN None
```

```
TRY
```

```
    connection = connect_to_database()
```

```
    IF connection is None
```

```
        # Handle the error or exit the program
```

```
        PASS
```

```
    cursor = connection.cursor()
```

```
EXCEPT MySQLError AS error
```

```
    PRINT "Error: " + error
```

```
    # Handle the error or exit the program
```

```
FUNCTION Fetch_Details(rollno):
```

```
    TRY
```

```
        cursor.execute("SELECT * FROM Students WHERE Rollno = %s", (rollno,))  
        student_data = cursor.fetchone()
```

```
    IF student_data is not None
```

```
        rollno, name, dob, father_name, mother_name, contact_number, course,  
present_days, absent_days, percentage_attendance = student_data
```

```
        PRINT "Roll No: " + rollno
```

```
        PRINT "Name: " + name
```

```
        PRINT "DOB: " + dob
```

```
        PRINT "Father's Name: " + father_name
```

```
        PRINT "Mother's Name: " + mother_name
```

```
        PRINT "Contact Number: " + contact_number
```

```
        PRINT "Course: " + course
```

```
        PRINT "Present Days: " + present_days
```

```
        PRINT "Absent Days: " + absent_days
```

```

        PRINT "Percentage Attendance: " + percentage_attendance + "%"
    ELSE
        PRINT "No Data found."
    EXCEPT MySQLError AS error
        PRINT "Error: " + error

# Define other functions (Change_data, Details_of_specific_data, New_Student,
Attendance, Delete_student, List_Student) in a similar manner

WHILE (True)
    PRINT ""
    Choose any of the option.
    1. Student Details
    2. Update Student Detail
    3. Details for a specific entry of student
    4. Entry of new student
    5. Attendance
    6. Delete Student
    7. List of Students in the class
    ""

    user_choice = INT(INPUT())
    IF user_choice == 1
        rollno = INT(INPUT("Enter the Roll no. :-"))
        CALL Fetch_Details(rollno)
    ELSE IF user_choice == 2
        rollno = INT(INPUT("Enter the Roll no. :-"))
        CALL Change_data(rollno)
    ELSE IF user_choice == 3
        rollno = INT(INPUT("Enter the Roll no. :-"))
        CALL Details_of_specific_data(rollno)
    ELSE IF user_choice == 4
        rollno = INT(INPUT("Enter the Roll no. :-"))
        name = INPUT("Enter the name of the student:-")
        dob = INPUT("Enter the DOB of the student in YYYY-MM-DD format:-")
        father_name = INPUT("Enter the Father's name of the student:-")
        mother_name = INPUT("Enter the Mother's name of the student:-")
        contact = INT(INPUT("Enter the contact number of the student:-"))
        course = INPUT("Enter the side/Course of the student:-")
        present = INPUT("Enter the no of days student is present:-")
        absent = INPUT("Enter the no of days student is absent:-")
        CALL New_Student(rollno, name, dob, father_name, mother_name, contact, course,
present, absent)
    ELSE IF user_choice == 5
        CALL Attendance()
    ELSE IF user_choice == 6

```

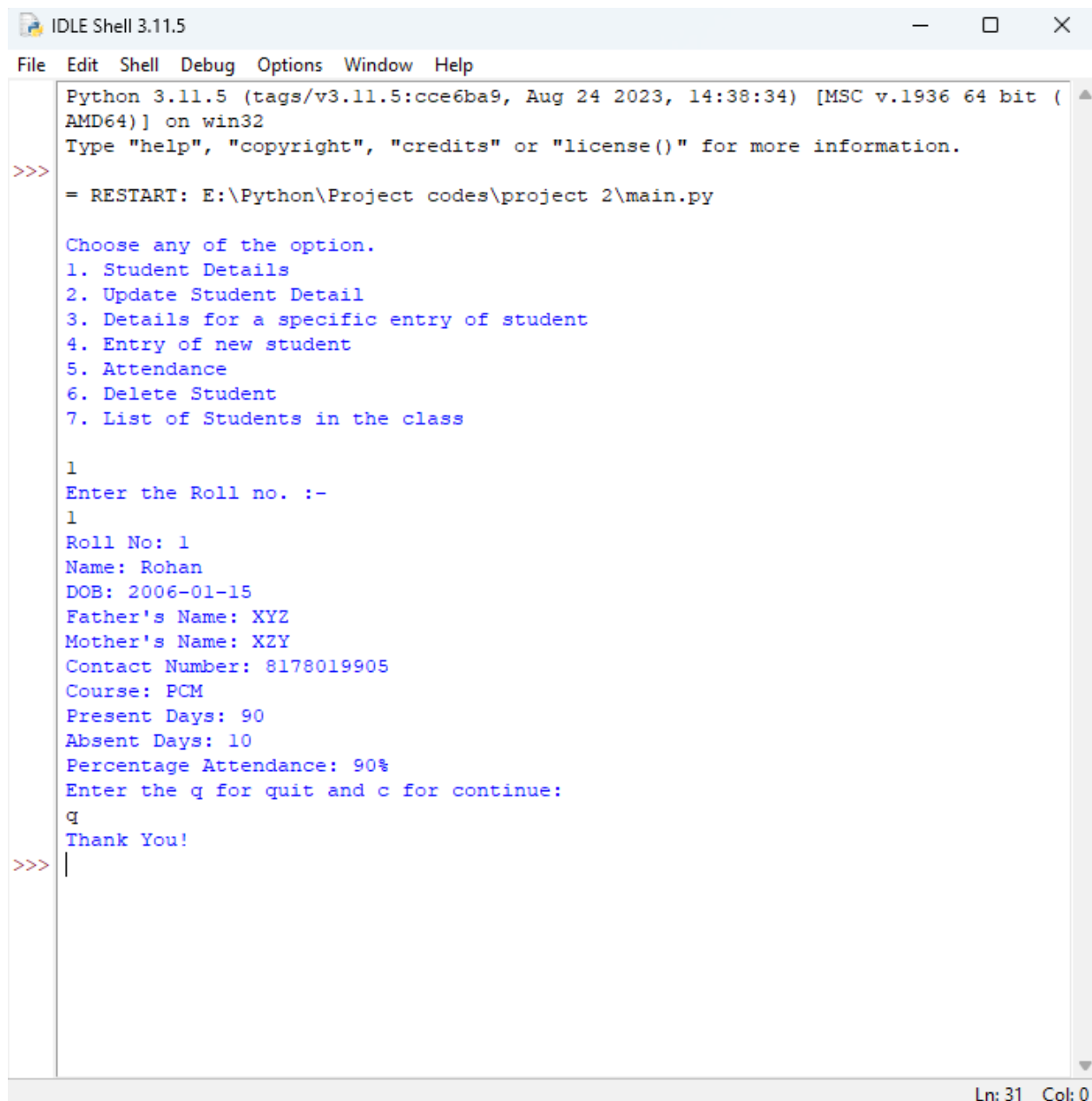


```
rollno = INT(INPUT("Enter the Roll no. :-"))
CALL Delete_student(rollno)
ELSE IF user_choice == 7
    CALL List_Student()

PRINT "Enter 'q' to quit or 'c' to continue: "
user_choice2 = " "
WHILE (user_choice2 != "q" AND user_choice2 != "c")
    user_choice2 = INPUT()
    IF user_choice2 == "q"
        EXIT()
    ELSE IF user_choice2 == "c"
        CONTINUE
```

Output of the Project

1. Student Details



```
Python 3.11.5 (tags/v3.11.5:cce6ba9, Aug 24 2023, 14:38:34) [MSC v.1936 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: E:\Python\Project codes\project 2\main.py

Choose any of the option.
1. Student Details
2. Update Student Detail
3. Details for a specific entry of student
4. Entry of new student
5. Attendance
6. Delete Student
7. List of Students in the class

1
Enter the Roll no. :-
1
Roll No: 1
Name: Rohan
DOB: 2006-01-15
Father's Name: XYZ
Mother's Name: XZY
Contact Number: 8178019905
Course: PCM
Present Days: 90
Absent Days: 10
Percentage Attendance: 90%
Enter the q for quit and c for continue:
q
Thank You!
>>> |
```

Ln: 31 Col: 0

2. Update Student Detail

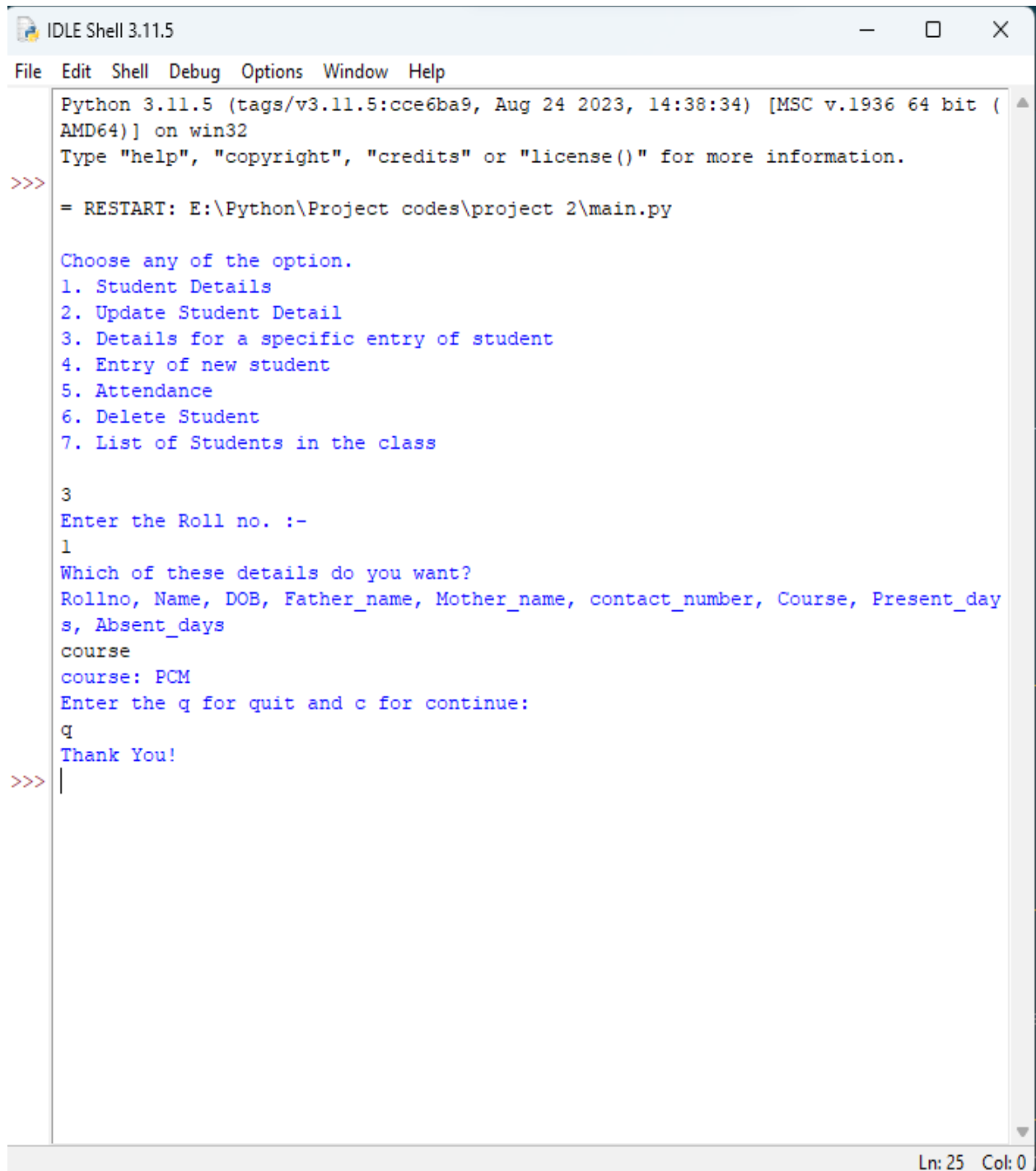
```
IDLE Shell 3.11.5
File Edit Shell Debug Options Window Help
Python 3.11.5 (tags/v3.11.5:cce6ba9, Aug 24 2023, 14:38:34) [MSC v.1936 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: E:\Python\Project codes\project 2\main.py

Choose any of the option.
1. Student Details
2. Update Student Detail
3. Details for a specific entry of student
4. Entry of new student
5. Attendance
6. Delete Student
7. List of Students in the class

2
Enter the Roll no. :-
1
Roll No: 1
Name: Rohan
DOB: 2006-01-15
Father's Name: XYZ
Mother's Name: XZY
Contact Number: 8178019905
Course: PCM
Present Days: 90
Absent Days: 10
Percentage Attendance: 90%
Which Data you want to change.
Rollno, Name, DOB, Father_name, Mother_name, contact_number, Course, Present_days, Absent_days
DOB
Enter the new value of DOB:-
2006-02-15
Your data changed successfully!
Enter the q for quit and c for continue:
q
Thank You!
>>> |
```

Ln: 37 Col: 0

3. Specific entry of the student



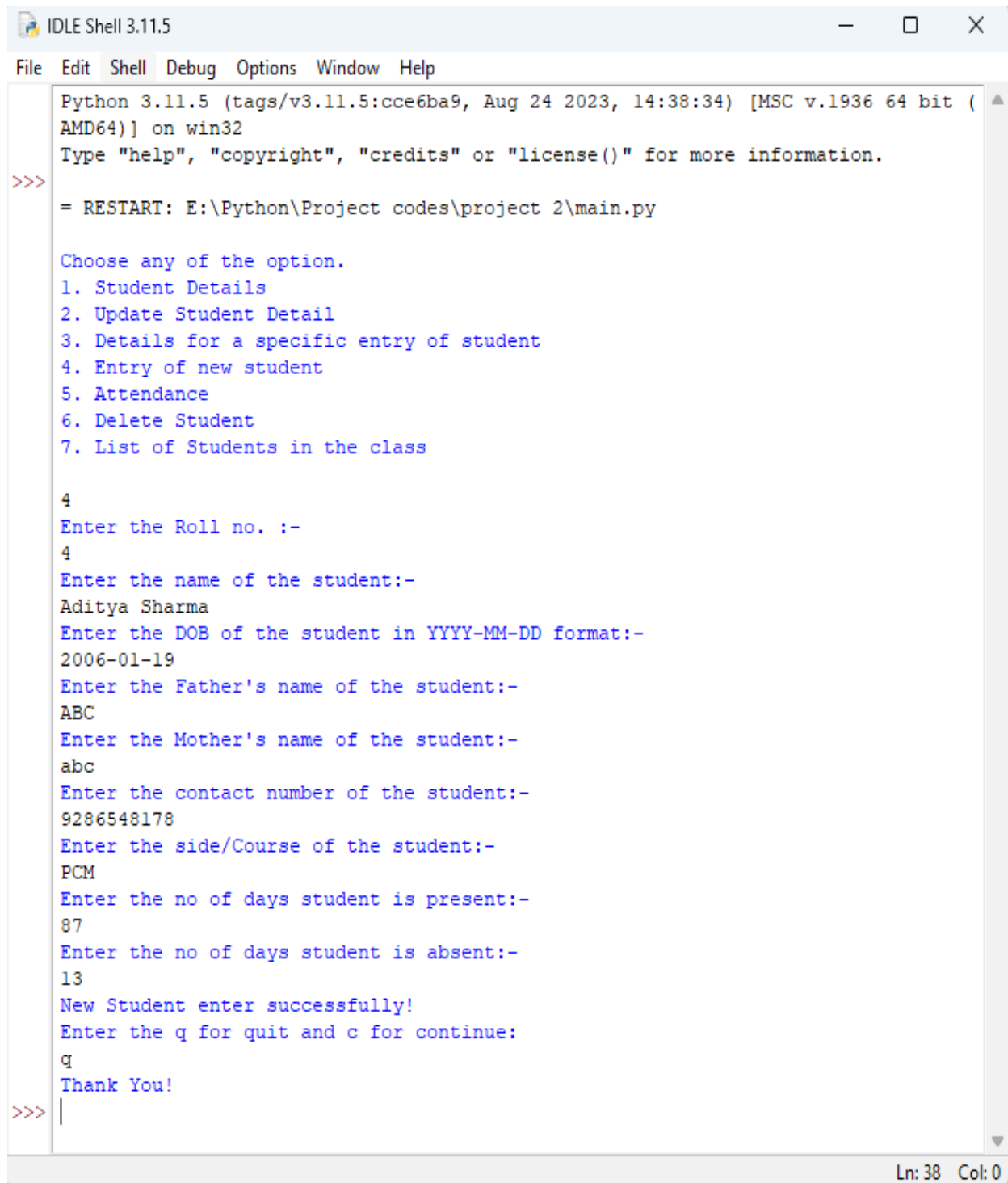
```
IDLE Shell 3.11.5
File Edit Shell Debug Options Window Help
Python 3.11.5 (tags/v3.11.5:cce6ba9, Aug 24 2023, 14:38:34) [MSC v.1936 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: E:\Python\Project codes\project 2\main.py

Choose any of the option.
1. Student Details
2. Update Student Detail
3. Details for a specific entry of student
4. Entry of new student
5. Attendance
6. Delete Student
7. List of Students in the class

3
Enter the Roll no. :-
1
Which of these details do you want?
Rollno, Name, DOB, Father_name, Mother_name, contact_number, Course, Present_days, Absent_days
course
course: PCM
Enter the q for quit and c for continue:
q
Thank You!
>>> |
```

Ln: 25 Col: 0

4. Add Student



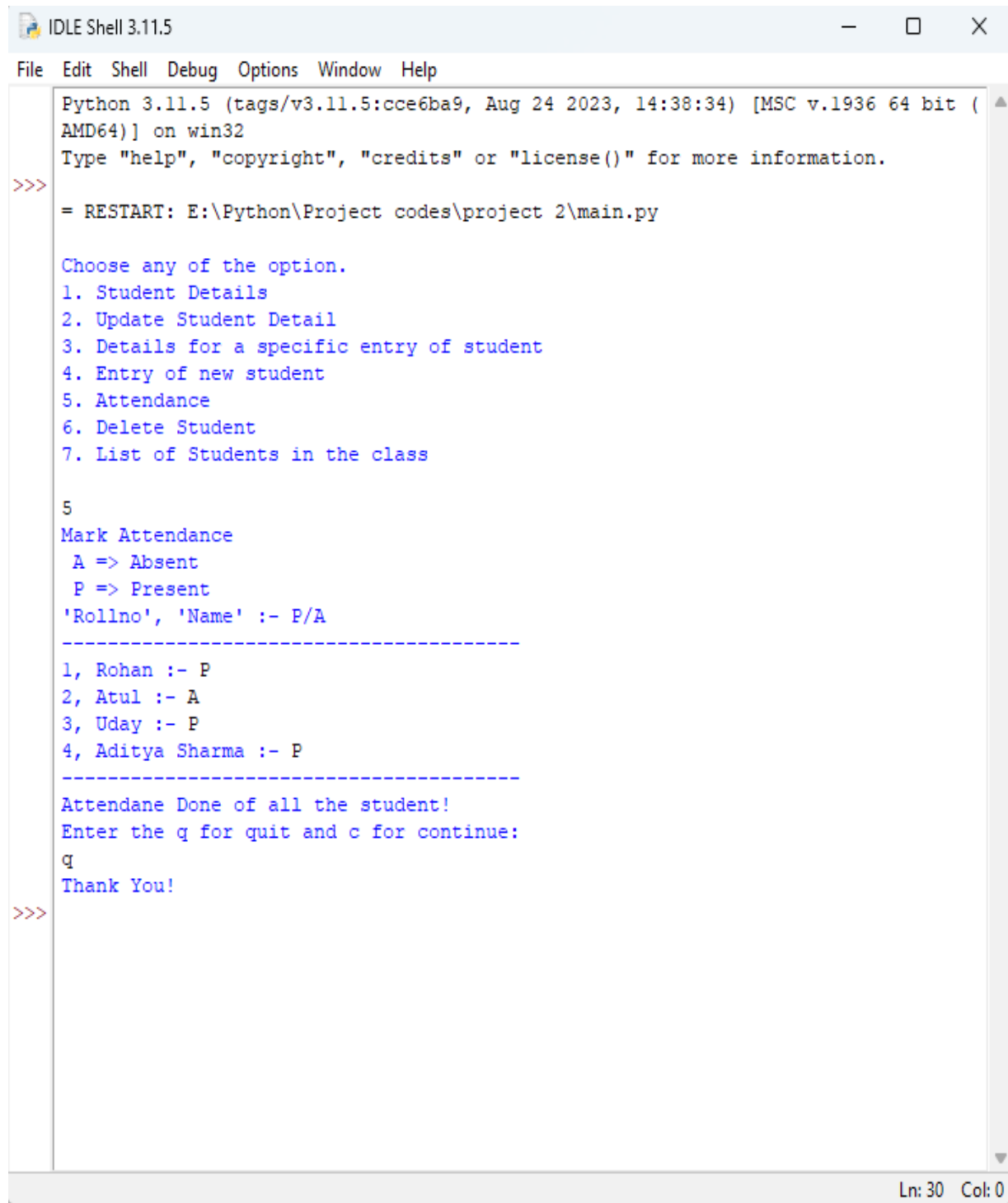
```
IDLE Shell 3.11.5
File Edit Shell Debug Options Window Help
Python 3.11.5 (tags/v3.11.5:cce6ba9, Aug 24 2023, 14:38:34) [MSC v.1936 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: E:\Python\Project codes\project 2\main.py

Choose any of the option.
1. Student Details
2. Update Student Detail
3. Details for a specific entry of student
4. Entry of new student
5. Attendance
6. Delete Student
7. List of Students in the class

4
Enter the Roll no. :-
4
Enter the name of the student:-
Aditya Sharma
Enter the DOB of the student in YYYY-MM-DD format:-
2006-01-19
Enter the Father's name of the student:-
ABC
Enter the Mother's name of the student:-
abc
Enter the contact number of the student:-
9286548178
Enter the side/Course of the student:-
PCM
Enter the no of days student is present:-
87
Enter the no of days student is absent:-
13
New Student enter successfully!
Enter the q for quit and c for continue:
q
Thank You!
>>> |
```

Ln: 38 Col: 0

5. Attendance



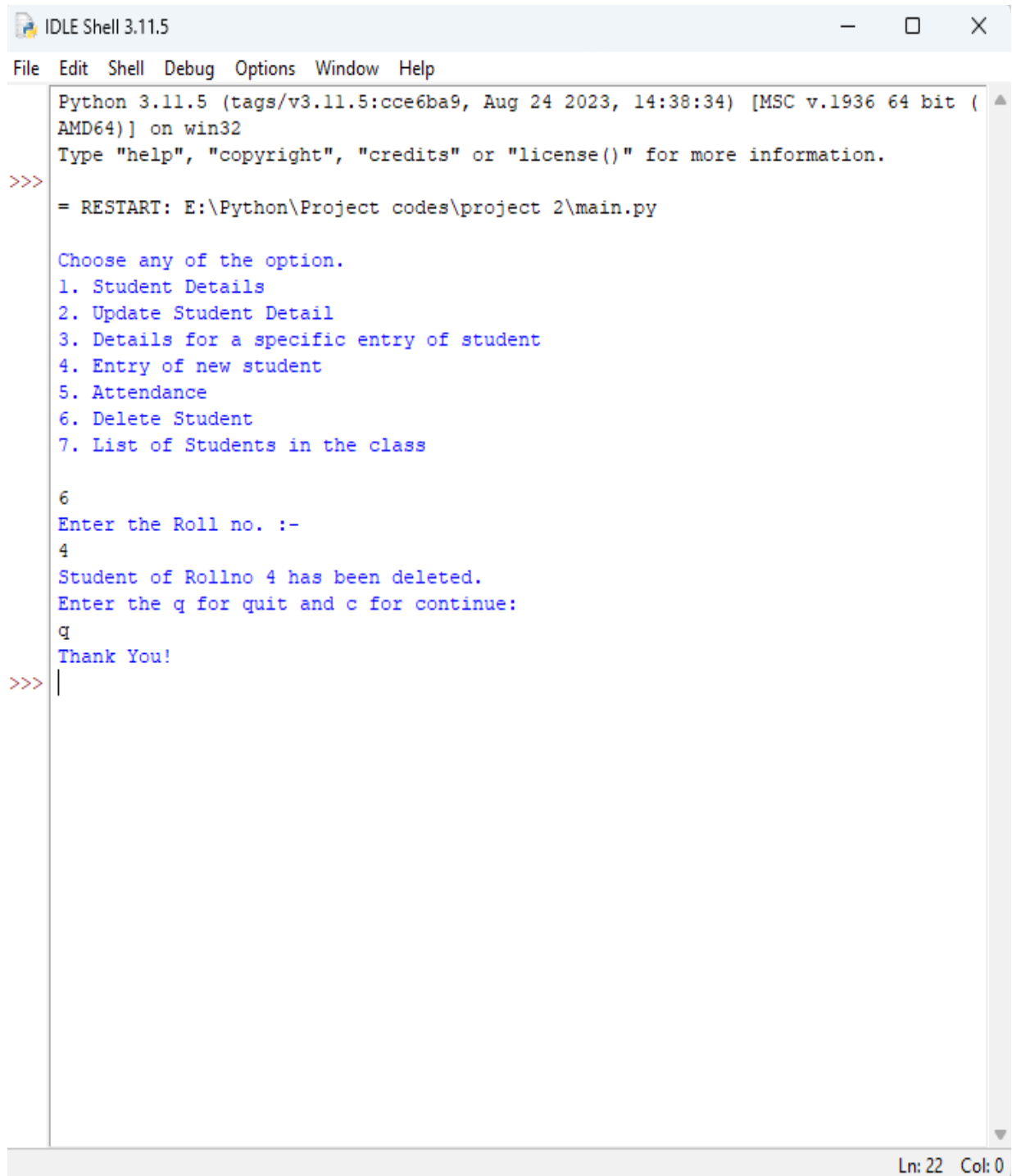
```
IDLE Shell 3.11.5
File Edit Shell Debug Options Window Help
Python 3.11.5 (tags/v3.11.5:cce6ba9, Aug 24 2023, 14:38:34) [MSC v.1936 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: E:\Python\Project codes\project 2\main.py

Choose any of the option.
1. Student Details
2. Update Student Detail
3. Details for a specific entry of student
4. Entry of new student
5. Attendance
6. Delete Student
7. List of Students in the class

5
Mark Attendance
A => Absent
P => Present
'Rollno', 'Name' :- P/A
-----
1, Rohan :- P
2, Atul :- A
3, Uday :- P
4, Aditya Sharma :- P
-----
Attendane Done of all the student!
Enter the q for quit and c for continue:
q
Thank You!
>>>
```

Ln: 30 Col: 0

6. Delete Student



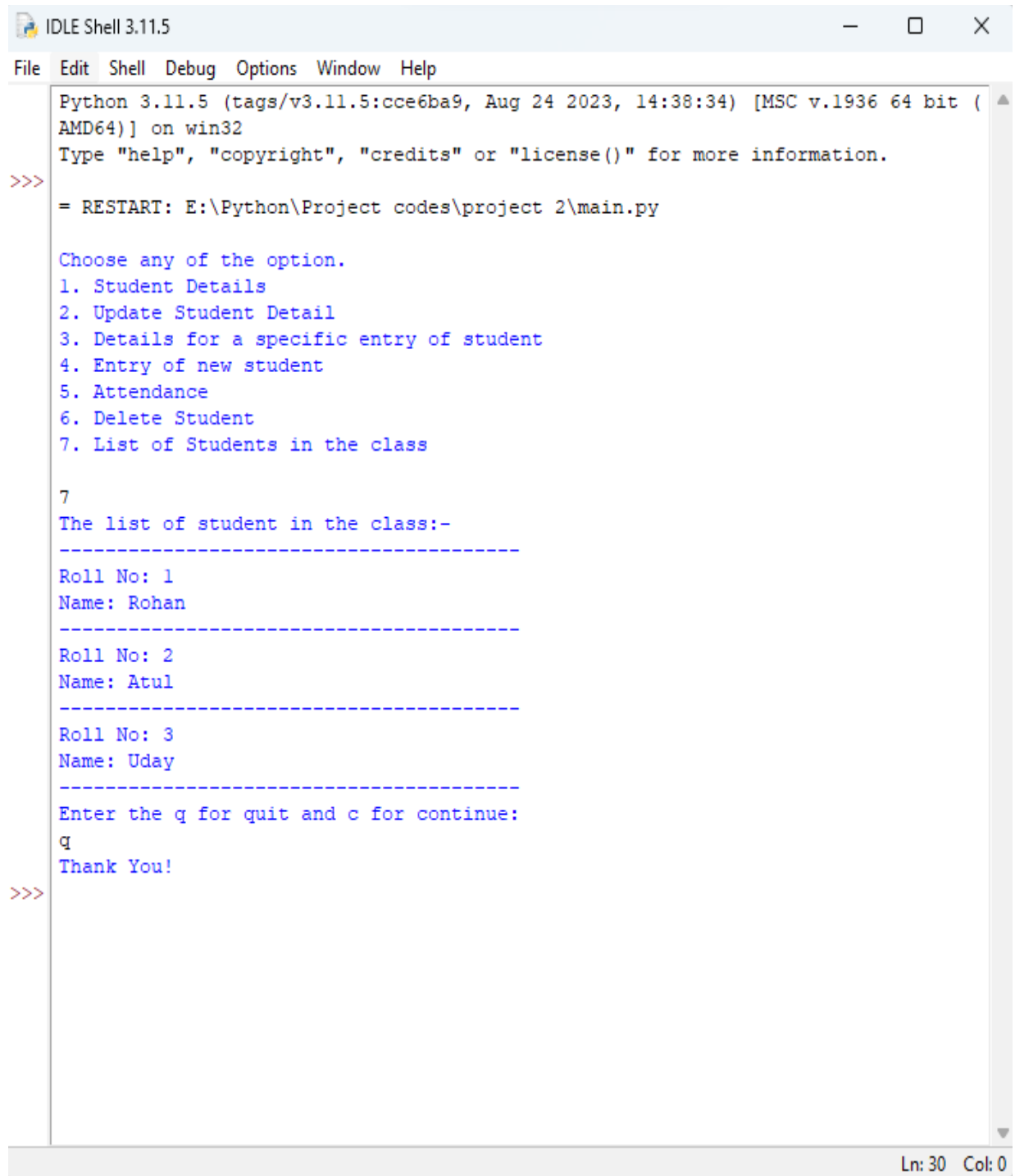
```
IDLE Shell 3.11.5
File Edit Shell Debug Options Window Help
Python 3.11.5 (tags/v3.11.5:cce6ba9, Aug 24 2023, 14:38:34) [MSC v.1936 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> = RESTART: E:\Python\Project codes\project 2\main.py

Choose any of the option.
1. Student Details
2. Update Student Detail
3. Details for a specific entry of student
4. Entry of new student
5. Attendance
6. Delete Student
7. List of Students in the class

6
Enter the Roll no. :-
4
Student of Rollno 4 has been deleted.
Enter the q for quit and c for continue:
q
Thank You!
>>> |
```

Ln: 22 Col: 0

7. List of Students



```
IDLE Shell 3.11.5
File Edit Shell Debug Options Window Help
Python 3.11.5 (tags/v3.11.5:cce6ba9, Aug 24 2023, 14:38:34) [MSC v.1936 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
= RESTART: E:\Python\Project codes\project 2\main.py

Choose any of the option.
1. Student Details
2. Update Student Detail
3. Details for a specific entry of student
4. Entry of new student
5. Attendance
6. Delete Student
7. List of Students in the class

7
The list of student in the class:-
-----
Roll No: 1
Name: Rohan
-----
Roll No: 2
Name: Atul
-----
Roll No: 3
Name: Uday
-----
Enter the q for quit and c for continue:
q
Thank You!
>>>
```

Ln: 30 Col: 0