National Institute of Technology Meghalaya

Assignment No: 04

Student Name: Subhasish Dutta

Roll Number: T23CS001

Programme: Master of Technology

Department: Computer Science & Engineering

Semester: 1

Course Name: ADVANCED DBMS LAB

Course Code: CS553

Assignment 04

Connecting the database

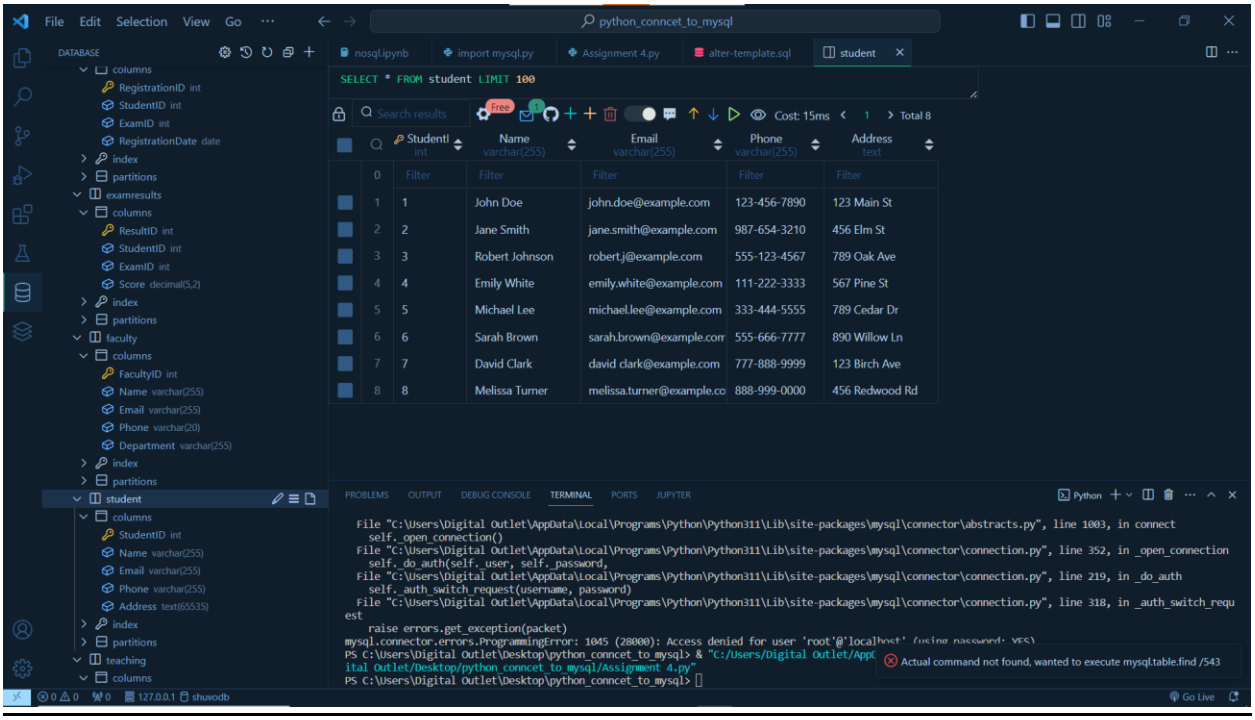
```
import mysql.connector
# Connect to the MySQL server
conn = mysql.connector.connect(host='localhost', user='root',
password='shuvo634',
database='shuvodb')
mycursor = conn.cursor()
```

Data insertion in the Table No : 01 (Student Table)

SQL Code

```
Insert_1 = '''
INSERT INTO Student(StudentID,Name,Email,Phone,Address)
VALUES (1,"John Doe", "john.doe@example.com", "123-456-7890", "123 Main St"),
(2, "Jane Smith", "jane.smith@example.com", "987-654-3210", "456 Elm St"),
(3, "Robert Johnson", "robert.j@example.com", "555-123-4567", "789 Oak Ave"),
(4, "Emily White", "emily.white@example.com", "111-222-3333", "567 Pine St"),
(5, "Michael Lee", "michael.lee@example.com", "333-444-5555", "789 Cedar Dr"),
(6, "Sarah Brown", "sarah.brown@example.com", "555-666-7777", "890 Willow Ln"),
(7, "David Clark", "david clark@example.com", "777-888-9999", "123 Birch Ave"),
(8, "Melissa Turner", "melissa.turner@example.com", "888-999-0000", "456 Redwood
Rd");
'''
```

Screenshot

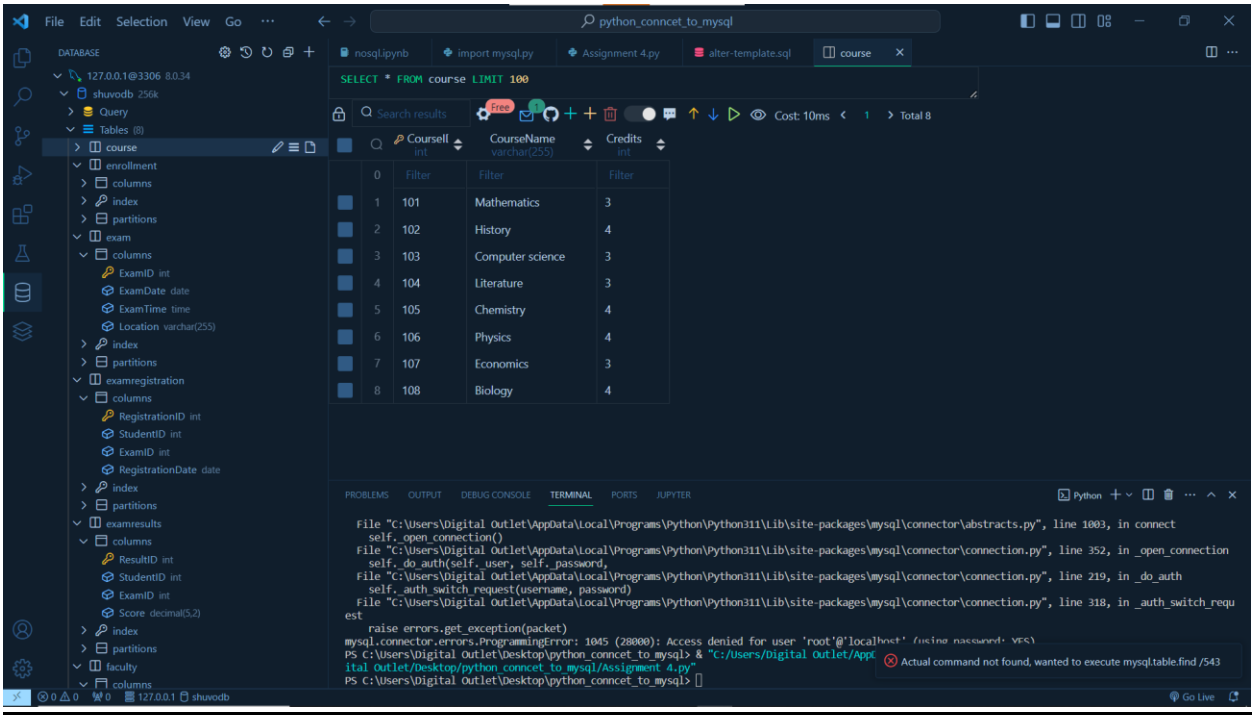


Data insertion in the Table No : 02 (Course Table)

SQL Code

```
Insert_2 = '''
INSERT INTO Course (CourseID, CourseName, Credits)
VALUES (101, "Mathematics" ,3),
(102, "History", 4),
(103, "Computer science",3),
(104, "Literature",3),
(105, "Chemistry", 4),
(106, "Physics", 4),
(107, "Economics",3),
(108, "Biology", 4);
'''
```

Screenshot

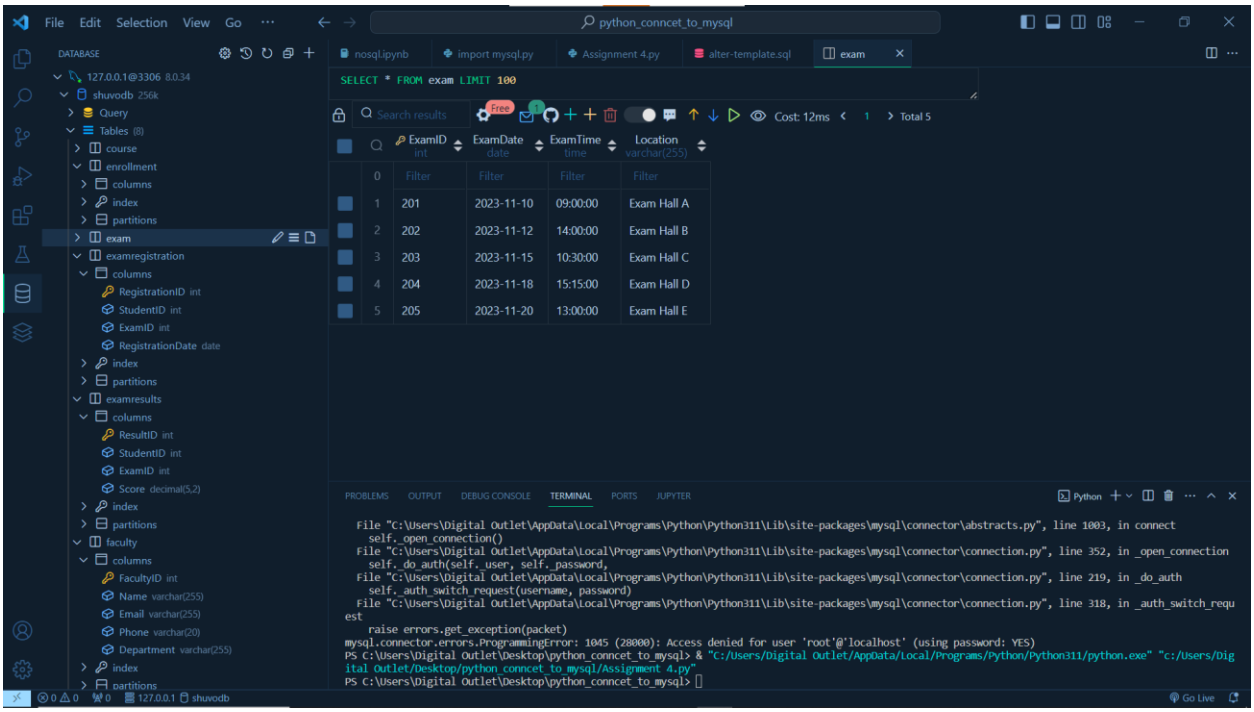


Data insertion in the Table No : 03 (Exam Table)

SQL Code

```
Insert_3 = '''
INSERT INTO Exam(ExamID, ExamDate, ExamTime, Location)
VALUES (201, "2023-11-10", "09:00:00", "Exam Hall A"),
(202, "2023-11-12", "14:00:00", "Exam Hall B"),
(203, "2023-11-15", "10:30:00", "Exam Hall C"),
(204, "2023-11-18", "15:15:00", "Exam Hall D"),
(205, "2023-11-20", "13:00:00", "Exam Hall E");
'''
```

Screenshot

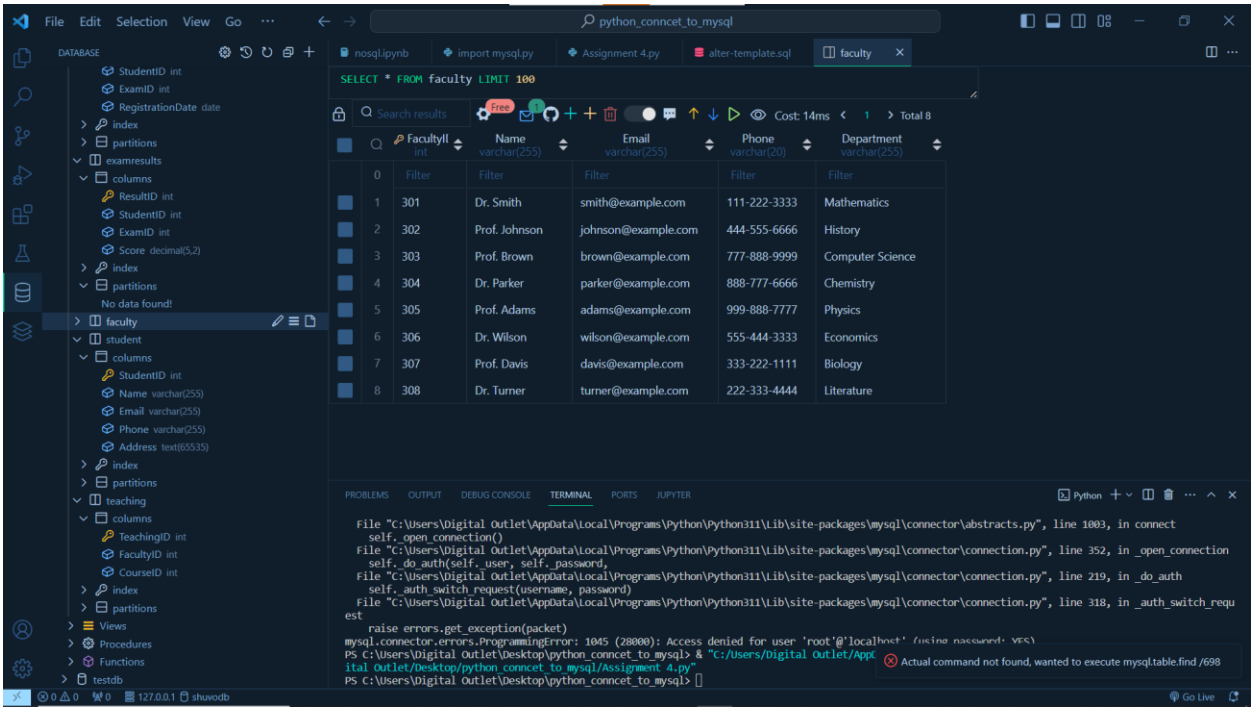


Data insertion in the Table No : 04 (Faculty Table)

SQL Code

```
Insert_4 = '''
INSERT INTO Faculty(FacultyID, Name, Email, Phone, Department)
VALUES (301, "Dr. Smith", "smith@example.com", "111-222-3333", "Mathematics"),
(302, "Prof. Johnson" ,"johnson@example.com", "444-555-6666", "History"),
(303, "Prof. Brown", "brown@example.com", "777-888-9999", "Computer Science"),
(304, "Dr. Parker", "parker@example.com", "888-777-6666", "Chemistry"),
(305, "Prof. Adams", "adams@example.com", "999-888-7777", "Physics"),
(306, "Dr. Wilson", "wilson@example.com", "555-444-3333", "Economics"),
(307, "Prof. Davis", "davis@example.com", "333-222-1111", "Biology"),
(308, "Dr. Turner", "turner@example.com", "222-333-4444", "Literature");
'''
```

Screenshot

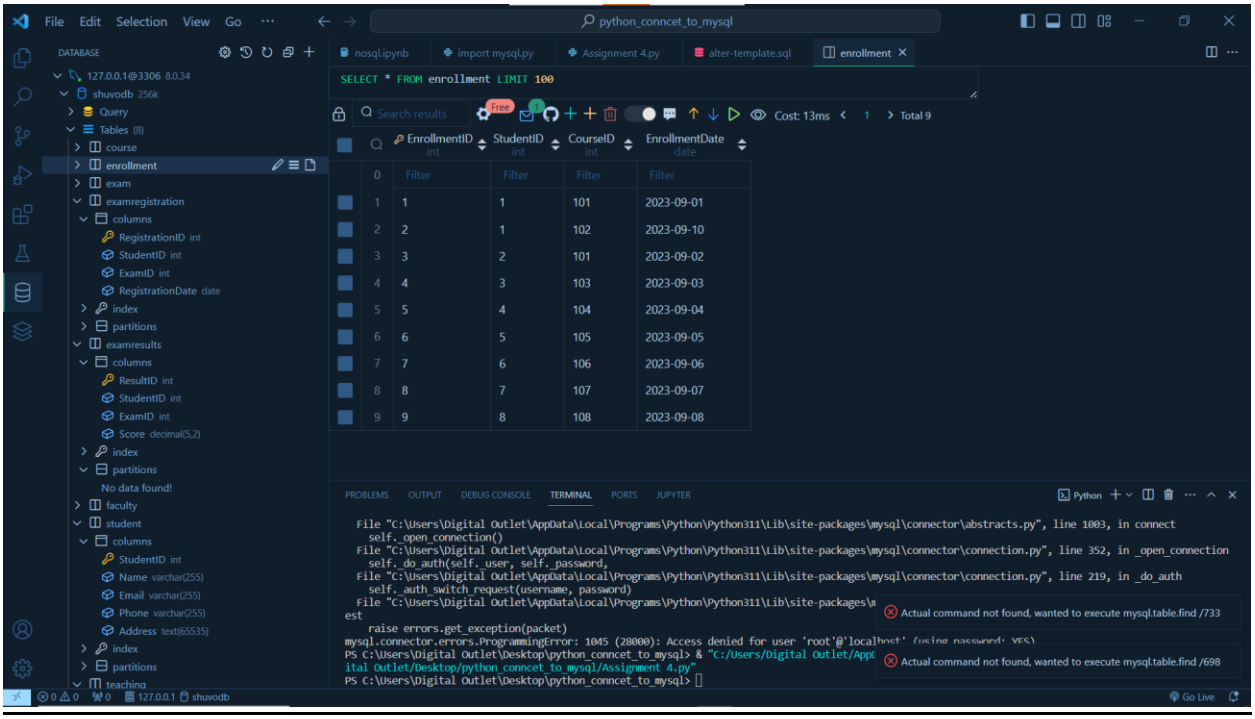


Data insertion in the Table No : 05 (Enrollment Table)

SQL Code

```
Insert_5 = '''
INSERT INTO Enrollment (EnrollmentID, StudentID, CourseID, EnrollmentDate)
VALUES (1, 1, 101, "2023-09-01"),
(2, 1, 102, "2023-09-10"),
(3, 2, 101, "2023-09-02"),
(4, 3, 103, "2023-09-03"),
(5, 4, 104, "2023-09-04"),
(6, 5, 105, "2023-09-05"),
(7, 6, 106, "2023-09-06"),
(8, 7, 107, "2023-09-07"),
(9, 8, 108, "2023-09-08");
'''
```

Screenshot

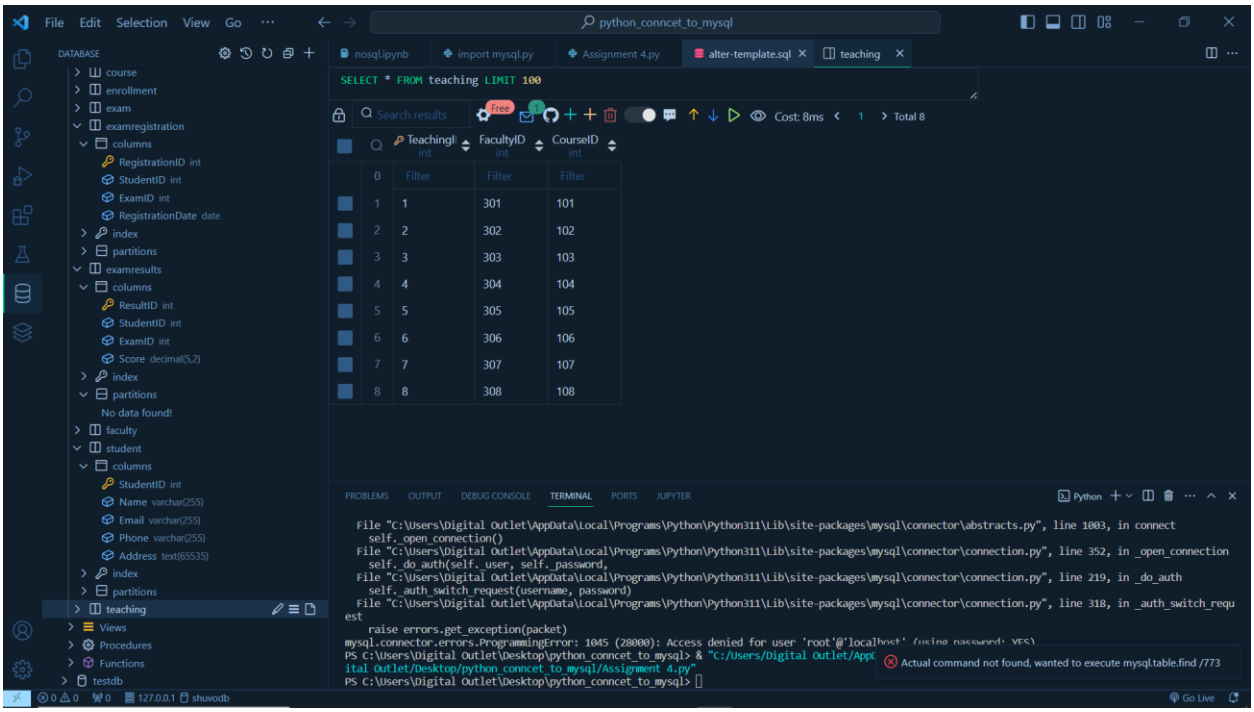


Data insertion in the Table No : 06 (Teaching Table)

SQL Code

```
Insert_6 = """
INSERT INTO Teaching (TeachingID, FacultyID, CourseID)
VALUES (1, 301, 101),
(2, 302, 102),
(3, 303, 103),
(4, 304, 104),
(5, 305, 105),
(6, 306, 106),
(7, 307, 107),
(8, 308, 108);
"""
```

Screenshot

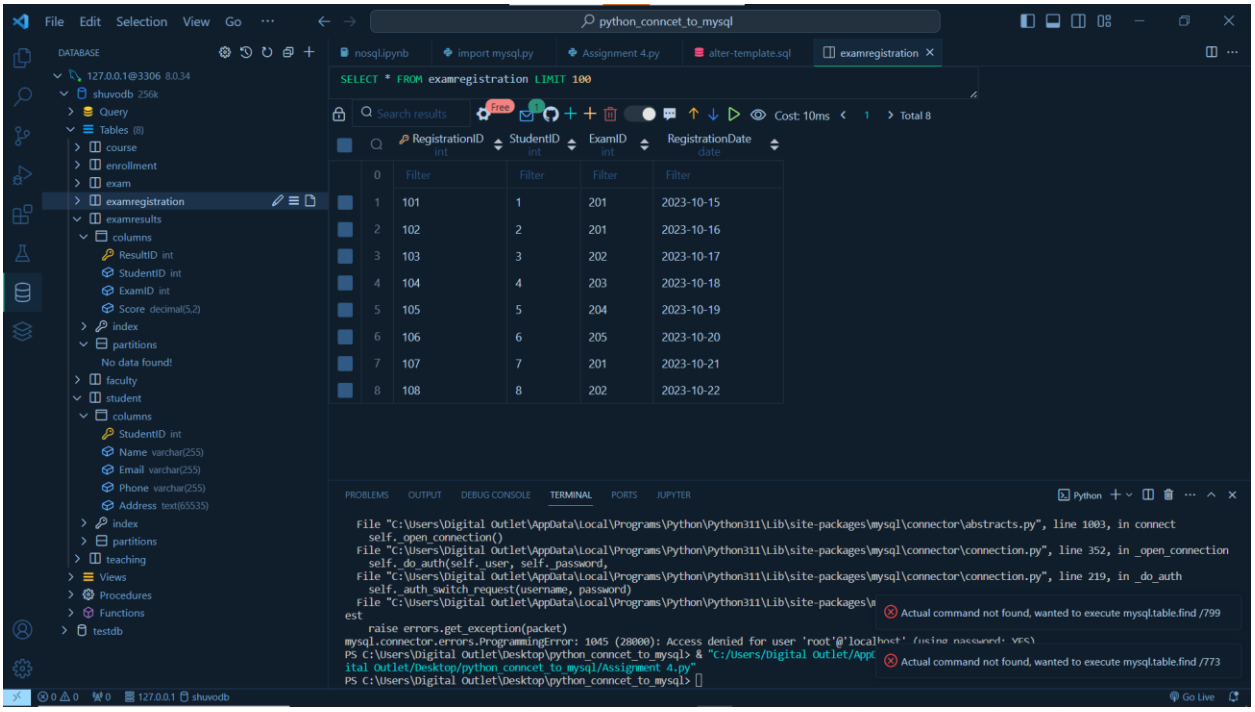


Data insertion in the Table No : 07 (ExamRegistration Table)

SQL Code

```
Insert_7 = '''
INSERT INTO ExamRegistration (RegistrationID, StudentID, ExamID,
RegistrationDate)
VALUES (101, 1, 201, "2023-10-15"),
(102, 2, 201, "2023-10-16"),
(103, 3, 202, "2023-10-17"),
(104, 4, 203, "2023-10-18"),
(105, 5, 204, "2023-10-19"),
(106, 6, 205, "2023-10-20"),
(107, 7, 201, "2023-10-21"),
(108, 8, 202, "2023-10-22");
'''
```

Screenshot

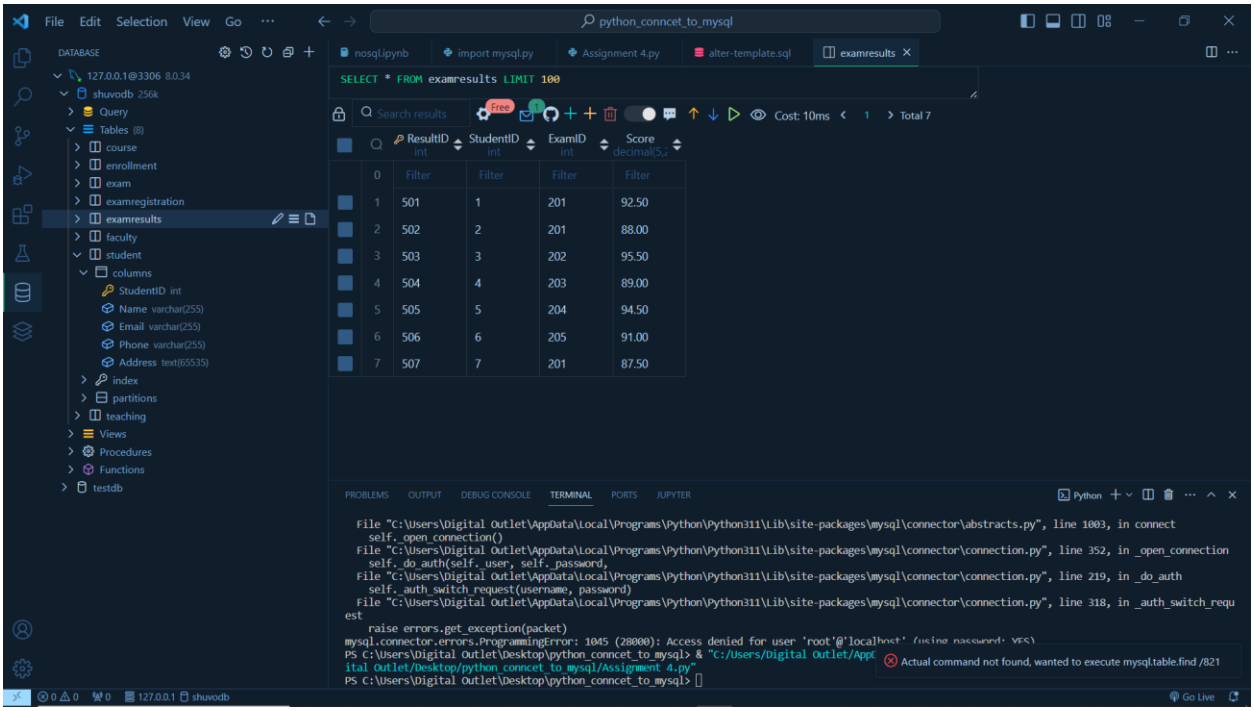


Data insertion in the Table No : 08 (ExamResults Table)

SQL Code

```
Insert_8 = """
INSERT INTO ExamResults (ResultID, StudentID, ExamID, score)
VALUES (501, 1, 201, 92.5),
(502, 2, 201, 88.0),
(503, 3, 202, 95.5),
(504, 4, 203, 89.0),
(505, 5, 204, 94.5),
(506, 6, 205, 91.0),
(507, 7, 201, 87.5);
"""
```

Screenshot



Executing the Table

SQL Code

```
# Execute the SQL query
mycursor.execute(Insert_1)
mycursor.execute(Insert_2)
mycursor.execute(Insert_3)
mycursor.execute(Insert_4)
mycursor.execute(Insert_5)
mycursor.execute(Insert_6)
mycursor.execute(Insert_7)
mycursor.execute(Insert_8)
# Commit the changes
conn.commit()
# Close the connection
conn.close()
```

SQL Full Code

```
import mysql.connector
# Connect to the MySQL server
conn = mysql.connector.connect(host='localhost', user='root',
password='shuvo634',
database='shuvodb')
mycursor = conn.cursor()
# Define the SQL query to create the table
Insert_1 = '''
INSERT INTO Student(StudentID,Name,Email,Phone,Address)
VALUES (1,"John Doe", "john.doe@example.com", "123-456-7890", "123 Main St"),
(2, "Jane Smith", "jane.smith@example.com", "987-654-3210", "456 Elm St"),
(3, "Robert Johnson", "robert.j@example.com", "555-123-4567", "789 Oak Ave"),
(4, "Emily White", "emily.white@example.com", "111-222-3333", "567 Pine St"),
(5, "Michael Lee", "michael.lee@example.com", "333-444-5555", "789 Cedar Dr"),
(6, "Sarah Brown", "sarah.brown@example.com", "555-666-7777", "890 Willow Ln"),
(7, "David Clark", "david clark@example.com", "777-888-9999", "123 Birch Ave"),
(8, "Melissa Turner", "melissa.turner@example.com", "888-999-0000", "456 Redwood
Rd");
'''
Insert_2 = '''
INSERT INTO Course (CourseID, CourseName, Credits)
VALUES (101, "Mathematics" ,3),
(102, "History", 4),
(103, "Computer science",3),
(104, "Literature",3),
(105, "Chemistry", 4),
(106, "Physics", 4),
(107, "Economics",3),
(108, "Biology", 4);
'''
Insert_3 = '''
INSERT INTO Exam(ExamID, ExamDate, ExamTime, Location)
VALUES (201, "2023-11-10", "09:00:00", "Exam Hall A"),
(202, "2023-11-12", "14:00:00", "Exam Hall B"),
(203, "2023-11-15", "10:30:00", "Exam Hall C"),
(204, "2023-11-18", "15:15:00", "Exam Hall D"),
(205, "2023-11-20", "13:00:00", "Exam Hall E");
'''
Insert_4 = '''
INSERT INTO Faculty(FacultyID, Name, Email, Phone, Department)
VALUES (301, "Dr. Smith", "smith@example.com", "111-222-3333", "Mathematics"),
(302, "Prof. Johnson" ,"johnson@example.com", "444-555-6666", "History"),
```

```
(303, "Prof. Brown", "brown@example.com", "777-888-9999", "Computer Science"),
(304, "Dr. Parker", "parker@example.com", "888-777-6666", "Chemistry"),
(305, "Prof. Adams", "adams@example.com", "999-888-7777", "Physics"),
(306, "Dr. Wilson", "wilson@example.com", "555-444-3333", "Economics"),
(307, "Prof. Davis", "davis@example.com", "333-222-1111", "Biology"),
(308, "Dr. Turner", "turner@example.com", "222-333-4444", "Literature");
'''
Insert_5 = '''
INSERT INTO Enrollment (EnrollmentID, StudentID, CourseID, EnrollmentDate)
VALUES (1, 1, 101, "2023-09-01"),
(2, 1, 102, "2023-09-10"),
(3, 2, 101, "2023-09-02"),
(4, 3, 103, "2023-09-03"),
(5, 4, 104, "2023-09-04"),
(6, 5, 105, "2023-09-05"),
(7, 6, 106, "2023-09-06"),
(8, 7, 107, "2023-09-07"),
(9, 8, 108, "2023-09-08");
'''
Insert_6 = """
INSERT INTO Teaching (TeachingID, FacultyID, CourseID)
VALUES (1, 301, 101),
(2, 302, 102),
(3, 303, 103),
(4, 304, 104),
(5, 305, 105),
(6, 306, 106),
(7, 307, 107),
(8, 308, 108);
"""
Insert_7 = '''
INSERT INTO ExamRegistration (RegistrationID, StudentID, ExamID,
RegistrationDate)
VALUES (101, 1, 201, "2023-10-15"),
(102, 2, 201, "2023-10-16"),
(103, 3, 202, "2023-10-17"),
(104, 4, 203, "2023-10-18"),
(105, 5, 204, "2023-10-19"),
(106, 6, 205, "2023-10-20"),
(107, 7, 201, "2023-10-21"),
(108, 8, 202, "2023-10-22");
'''
Insert_8 = """
INSERT INTO ExamResults (ResultID, StudentID, ExamID, score)
VALUES (501, 1, 201, 92.5),
```

```
(502, 2, 201, 88.0),
(503, 3, 202, 95.5),
(504, 4, 203, 89.0),
(505, 5, 204, 94.5),
(506, 6, 205, 91.0),
(507, 7, 201, 87.5);
"""
# Execute the SQL query
mycursor.execute(Insert_1)
mycursor.execute(Insert_2)
mycursor.execute(Insert_3)
mycursor.execute(Insert_4)
mycursor.execute(Insert_5)
mycursor.execute(Insert_6)
mycursor.execute(Insert_7)
mycursor.execute(Insert_8)
# Commit the changes
conn.commit()
# Close the connection
conn.close()
```