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C07
SPP-II

Aim:To implement CRUD operations using python and MySql database.

Code:

```
import mysql.connector


# Connecting to MySQL Database
db = mysql.connector.connect(
    host="localhost",
    user="root",
    password="123456",   # write your MySQL password here
    database="collegedb",
    port=3306            # ✅ Correct port

)

cursor = db.cursor()

# ------------------ Create Operation ------------------
def insert_student(name, course, marks):
    query = "INSERT INTO students (name, course, marks) VALUES (%s, %s, %s)"
    values = (name, course, marks)
    cursor.execute(query, values)
    db.commit()
    print("Student added successfully!")

# ------------------ Read Operation ------------------
def fetch_students():
    query = "SELECT * FROM students"
    cursor.execute(query)
    records = cursor.fetchall()
```

```
    print("\n-- Student Records --")
    for row in records:
        print(row)

# ------------------ Update Operation ------------------
def update_marks(student_id, new_marks):
    query = "UPDATE students SET marks = %s WHERE id = %s"
    values = (new_marks, student_id)
    cursor.execute(query, values)
    db.commit()
    print("Marks updated successfully!")

# ------------------ Delete Operation ------------------
def delete_student(student_id):
    query = "DELETE FROM students WHERE id = %s"
    values = (student_id,)
    cursor.execute(query, values)
    db.commit()
    print("Student deleted successfully!")

# ------------------ Main Program ------------------
while True:
    print("\n--- CRUD Menu ---")
    print("1. Insert Student")
    print("2. Display Students")
    print("3. Update Marks")
    print("4. Delete Student")
    print("5. Exit")

    choice = int(input("Enter your choice: "))
```

```
    if choice == 1:
        name = input("Enter Name: ")
        course = input("Enter Course: ")
        marks = int(input("Enter Marks: "))
        insert_student(name, course, marks)

    elif choice == 2:
        fetch_students()

    elif choice == 3:
        student_id = int(input("Enter Student ID to Update: "))
        marks = int(input("Enter New Marks: "))
        update_marks(student_id, marks)

    elif choice == 4:
        student_id = int(input("Enter Student ID to Delete: "))
        delete_student(student_id)

    elif choice == 5:
        print("Exiting program...")
        break

    else:
        print("Invalid Choice! Try again.")
```

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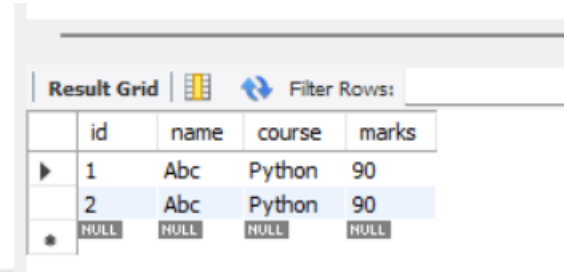
```
PS E:\Clg Python> python -u "e:\Clg Python\conn.py"

--- CRUD Menu ---
1. Insert Student
2. Display Students
3. Update Marks
4. Delete Student
5. Exit
Enter your choice: 1
Enter Name: Abc
Enter Course: Python
Enter Marks: 90
Student added successfully!

--- CRUD Menu ---
1. Insert Student
2. Display Students
3. Update Marks
4. Delete Student
5. Exit
Enter your choice: 2

-- Student Records --
(1, 'Abc', 'Python', 90)
(2, 'Abc', 'Python', 90)

--- CRUD Menu ---
1. Insert Student
2. Display Students
3. Update Marks
4. Delete Student
5. Exit
```



Result Grid | Filter Rows:

	id	name	course	marks
▶	1	Abc	Python	90
	2	Abc	Python	90
*	NULL	NULL	NULL	NULL