ASSIGNMENT – X

TITLE :
Database Connectivity: Program to implement MySQL database connectivity with a front-end language (Python) to perform database navigation operations (Add, Delete, Edit, View).

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QUERIES :
CREATE DATABASE PR10;
USE PR10;

CREATE TABLE users
(user_id INT AUTO_INCREMENT PRIMARY KEY, name VARCHAR(20), age INT);

1) Add :

```
C:\Users\shubh>python PR10.py

Successfully Connected to MYSQL..!

SELECT YOUR CHOICE :
1. Add Record
2. Update Record
3. Delete Record
4. View Records

Enter Your Choice : 1
Enter Name : Akshay
Enter Age : 23
Record Added Successfully : Akshay, 23

SELECT YOUR CHOICE :
1. Add Record
2. Update Record
3. Delete Record
4. View Records

Enter Your Choice : 1
Enter Name : Sarthak
Enter Age : 34
Record Added Successfully : Sarthak, 34
```

	user_id	name	age
▶	1	Akshay	23
	2	Sarthak	34
*	NULL	NULL	NULL

2)Update :

```
SELECT YOUR CHOICE :
1. Add Record
2. Update Record
3. Delete Record
4. View Records

Enter Your Choice : 2
Enter User ID to Update : 1
Enter New Name : Mayank
Enter New Age : 17
Record Updated Successfully : ID 1 >>> Mayank, 17
```

user_id	name	age
1	Mayank	17
2	Sarthak	34
NULL	NULL	NULL

3) Delete :

```
SELECT YOUR CHOICE :
1. Add Record
2. Update Record
3. Delete Record
4. View Records

Enter Your Choice : 3
Enter User ID to Delete : 2
Records with ID 2 Deleted Successfully
```

user_id	name	age
1	Mayank	17
NULL	NULL	NULL

4)View :

```
SELECT YOUR CHOICE :
1. Add Record
2. Update Record
3. Delete Record
4. View Records

Enter Your Choice : 4
Records :
(1, 'Mayank', 17)
```

```
import mysql.connector
conn = mysql.connector.connect(
   host = 'localhost',
   user = 'root',
   password = 'root',
   database = 'PR10')

if conn.is_connected():
        print("\nSuccessfully Connected to MYSQL..!\n")
cursor = conn.cursor()

while True:
        print("SELECT YOUR CHOICE :")
        print("1. Add Record")
        print("2. Update Record")
        print("3. Delete Record")
        print("4. View Records\n")
        choice = int(input("Enter Your Choice : "))

        if choice == 1:
                name = input("Enter Name : ")
                age = int(input("Enter Age : "))
                cursor.execute("INSERT INTO users(name, age) VALUES (%s, %s)", (name, age))
                conn.commit()
                print(f"Record Added Successfully : {name}, {age}\n")

        elif choice == 2:
                user_id = int(input("Enter User ID to Update : "))
                new_name = input("Enter New Name : ")
                new_age = int(input("Enter New Age : "))
                cursor.execute("UPDATE users SET name = %s, age = %s WHERE user_id = %s",
                (new_name, new_age, user_id))
                conn.commit()
                print(f"Record Updated Successfully : ID {user_id} >>> {new_name},
                {new_age}\n")

        elif choice == 3:
                user_id = int(input("Enter User ID to Delete : "))
                cursor.execute("DELETE FROM users WHERE user_id = %s", (user_id,))
                conn.commit()
                print(f"Records with ID {user_id} Deleted Successfully\n")

        elif choice == 4:
                print("Records : ")
                cursor.execute("SELECT * FROM users")
                for record in cursor.fetchall():
                        print(record)
                print("\n")
        else:
                print("INVALID INPUT")
cursor.close()
conn.close()
```