

Finals Lab Task 6. Connection Mysql using Python using CLI

Code:

```
import mysql.connector

conn = mysql.connector.connect(
    host="localhost",
    user="root",
    password="",
    database="testdb"
)

cursor = conn.cursor()

def add_employee():
    name = input("Enter name: ")
    emp_id = input("Enter employee ID: ")
    salary = float(input("Enter salary: "))
    query = "INSERT INTO employees (name, emp_id, salary) VALUES (%s, %s, %s)"
    cursor.execute(query, (name, emp_id, salary))
    conn.commit()
    print("Employee added successfully!\n")
    view_employees()

def view_employees():
    cursor.execute("SELECT * FROM employees")
    rows = cursor.fetchall()
    if rows:
        print("\nEmployees List:")
        for row in rows:
            print(row)
    else:
        print("\nNo employees found.")

def update_employee():
    emp_id = input("Enter employee ID to update: ")
    name = input("Enter new name: ")
    salary = float(input("Enter new salary: "))
    query = "UPDATE employees SET name = %s, salary = %s WHERE emp_id = %s"
    cursor.execute(query, (name, salary, emp_id))
```

```
conn.commit()
print("Employee updated successfully!\n")
view_employees()

def delete_employee():
    emp_id = input("Enter employee ID to delete: ")
    query = "DELETE FROM employees WHERE emp_id = %s"
    cursor.execute(query, (emp_id,))
    conn.commit()
    print("Employee deleted successfully!\n")
    view_employees()

def search_employee():
    print("Search by:")
    print("1. Name")
    print("2. Employee ID")
    choice = input("Enter your choice: ")
    if choice == "1":
        name = input("Enter name: ")
        query = "SELECT * FROM employees WHERE name LIKE %s"
        cursor.execute(query, ('%' + name + '%',))
    elif choice == "2":
        emp_id = input("Enter employee ID: ")
        query = "SELECT * FROM employees WHERE emp_id = %s"
        cursor.execute(query, (emp_id,))
    else:
        print("Invalid choice.")
        return
    rows = cursor.fetchall()
    if rows:
        print("\nEmployee(s) found:")
        for row in rows:
            print(row)
    else:
        print("\nNo employees found.")

def main():
    while True:
        print("\n---- Employee Management System ----")
        print("1. Add Employee")
        print("2. View Employees")
        print("3. Update Employee")
        print("4. Delete Employee")
```

```
print("5. Search Employee")
print("6. Exit")
choice = input("Select an option (1-6): ")
if choice == "1":
    add_employee()
elif choice == "2":
    view_employees()
elif choice == "3":
    update_employee()
elif choice == "4":
    delete_employee()
elif choice == "5":
    search_employee()
elif choice == "6":
    break
else:
    print("Invalid choice. Please try again.")

if __name__ == '__main__':
    main()
```

Output:

Add Employee

```
----- Employee Management System -----
1. Add Employee
2. View Employees
3. Update Employee
4. Delete Employee
5. Search Employee
6. Exit
Select an option (1-6): 1
Enter name: Daniel
Enter employee ID: 20
Enter salary: 5000
Employee added successfully!
```

```
Employees List:
(20, 'Daniel', 5000.0)
(67, 'Jean', 67.0)
(101, 'Russel', 0.0)
(102, 'Zaldy', 10.0)
(500, 'Lance', 89.0)
```

View Employees

```
----- Employee Management System -----
1. Add Employee
2. View Employees
3. Update Employee
4. Delete Employee
5. Search Employee
6. Exit
Select an option (1-6): 2
```

Employees List:

```
(20, 'Daniel', 5000.0)
(67, 'Jean', 67.0)
(101, 'Russel', 0.0)
(102, 'Zaldy', 10.0)
(500, 'Lance', 89.0)
```

Update Employee

```
----- Employee Management System -----
1. Add Employee
2. View Employees
3. Update Employee
4. Delete Employee
5. Search Employee
6. Exit
Select an option (1-6): 3
Enter employee ID to update: 67
Enter new name: Jean Claude
Enter new salary: 6700
Employee updated successfully!
```

Employees List:

```
(20, 'Daniel', 5000.0)
(67, 'Jean Claude', 6700.0)
(101, 'Russel', 0.0)
(102, 'Zaldy', 10.0)
(500, 'Lance', 89.0)
```

Delete Employee

```
----- Employee Management System -----  
1. Add Employee  
2. View Employees  
3. Update Employee  
4. Delete Employee  
5. Search Employee  
6. Exit  
Select an option (1-6): 4  
Enter employee ID to delete: 102  
Employee deleted successfully!
```

Employees List:

```
(20, 'Daniel', 5000.0)  
(67, 'Jean Claude', 6700.0)  
(101, 'Russel', 0.0)  
(500, 'Lance', 89.0)
```

Search Employee

```
----- Employee Management System -----  
1. Add Employee  
2. View Employees  
3. Update Employee  
4. Delete Employee  
5. Search Employee  
6. Exit  
Select an option (1-6): 5  
Search by:  
1. Name  
2. Employee ID  
Enter your choice: 1  
Enter name: Dan  
  
Employee(s) found:  
(20, 'Daniel', 5000.0)
```