**MySQL Test**

**Instructions:**

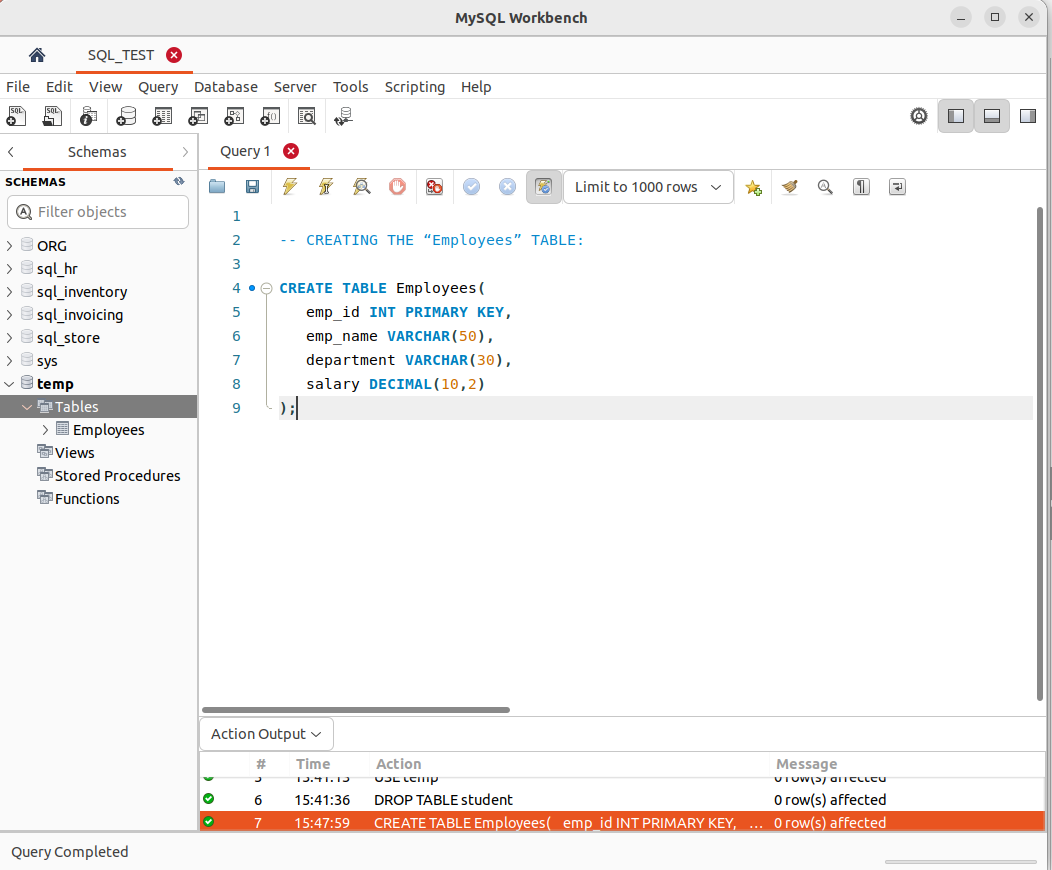
* This test consists of a total of 10 questions.
* Each question carries 10 marks, resulting in a total of 100 marks.
* Write the SQL queries to answer each question.
* Feel free to use any necessary syntax, functions, or clauses supported by MySQL.
* The queries should be optimized and accurate.
* Write your answers below to each question.
* Good luck!

**Questions**:

1. **Create a table named "Employees" with the following columns:**

* emp\_id (integer, primary key)
* emp\_name (varchar, maximum length of 50)
* department (varchar, maximum length of 30)
* salary (decimal with precision 10, scale 2)

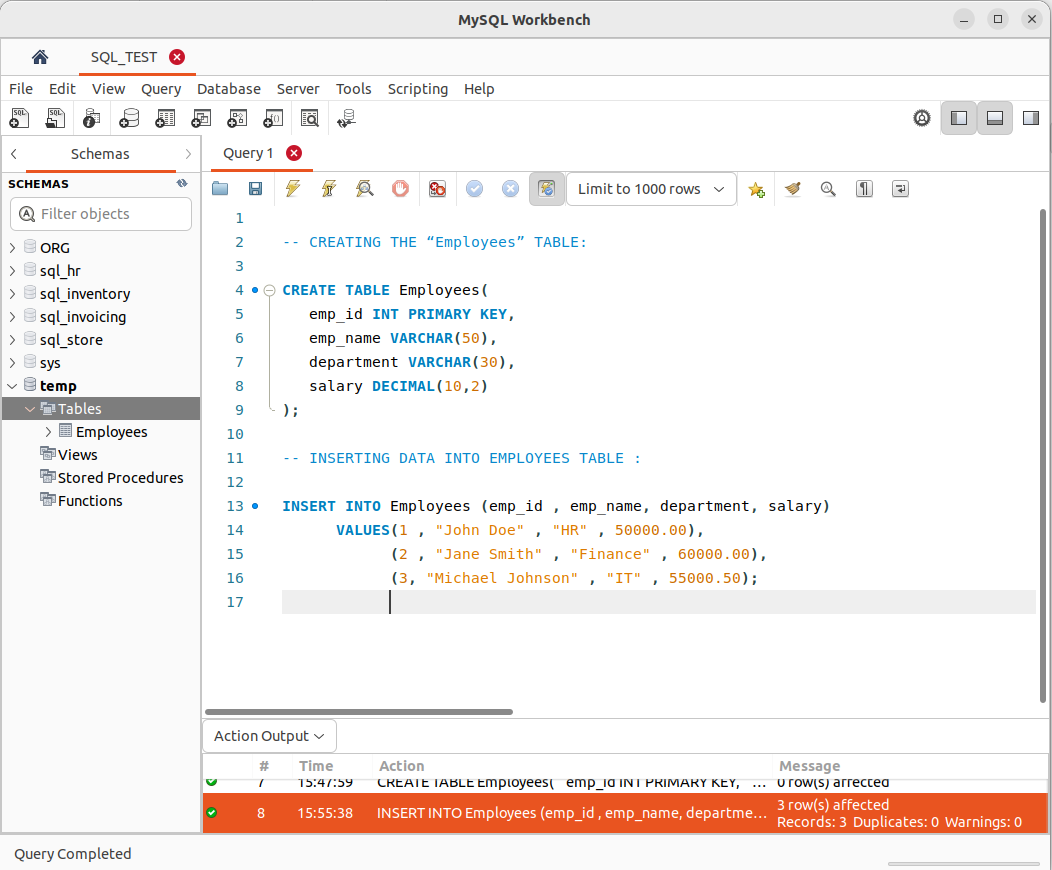
CREATING THE “Employees” TABLE:



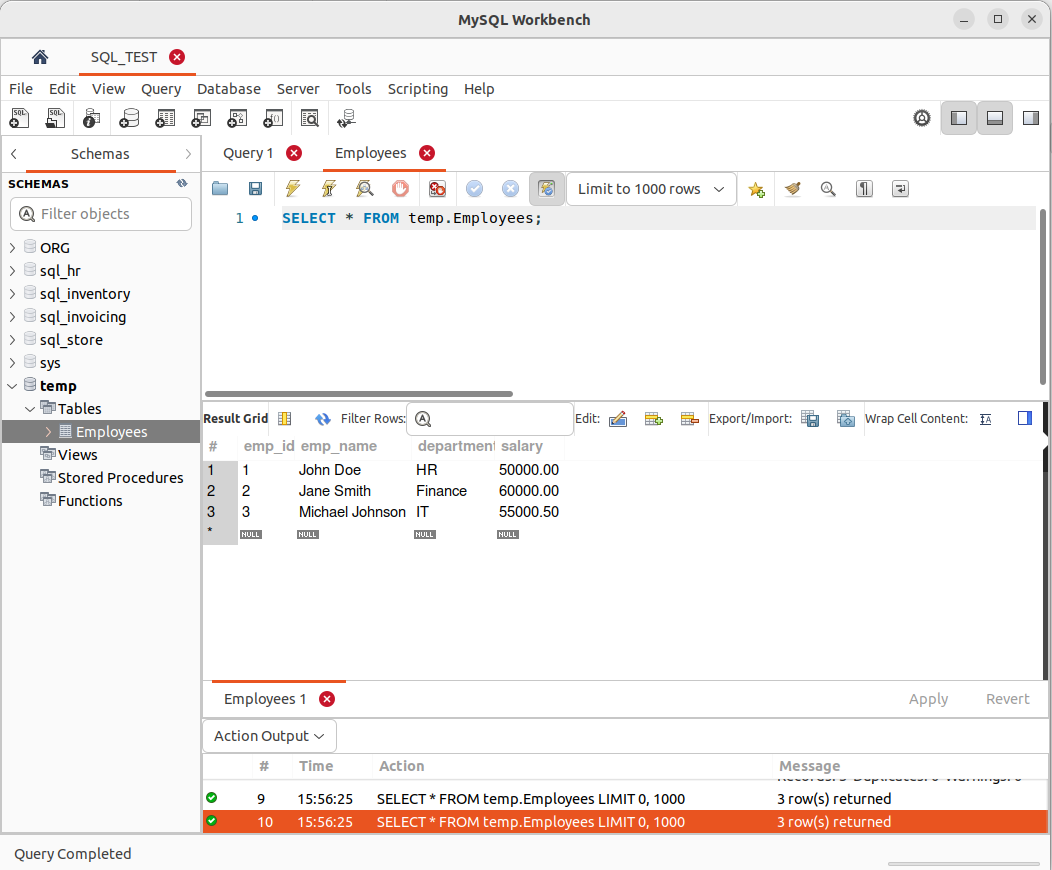
**2. Insert the following data into the "Employees" table:**

* emp\_id: 1, emp\_name: "John Doe", department: "HR", salary: 50000.00
* emp\_id: 2, emp\_name: "Jane Smith", department: "Finance", salary: 60000.00
* emp\_id: 3, emp\_name: "Michael Johnson", department: "IT", salary: 55000.50

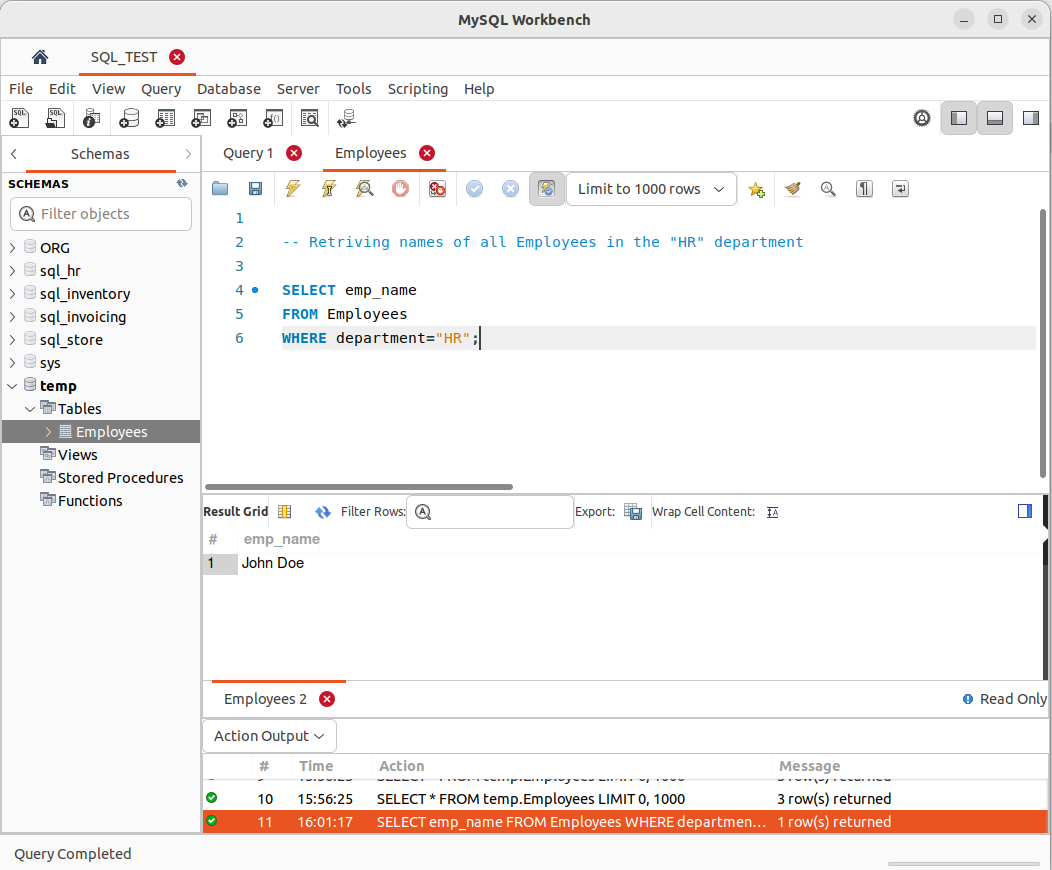
INSERTING DATA INTO EMPLOYEES TABLE :

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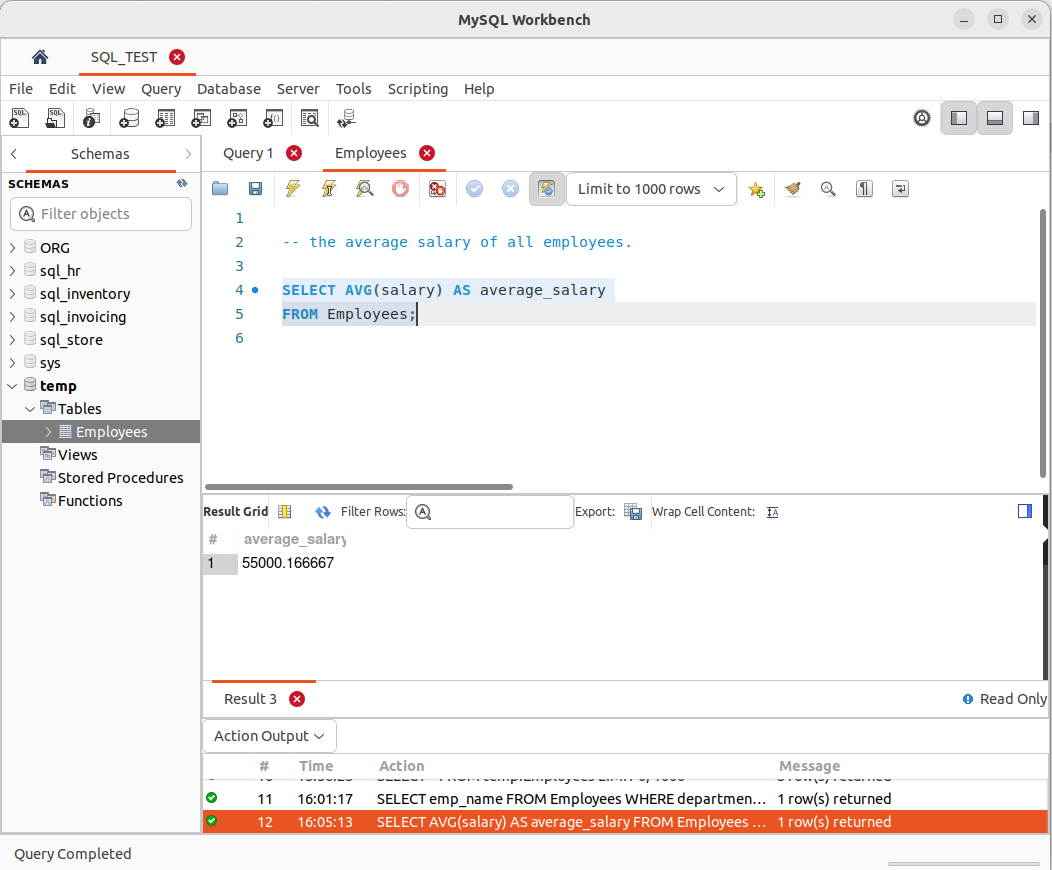
verifying that values are inserted into the table “Employees”:



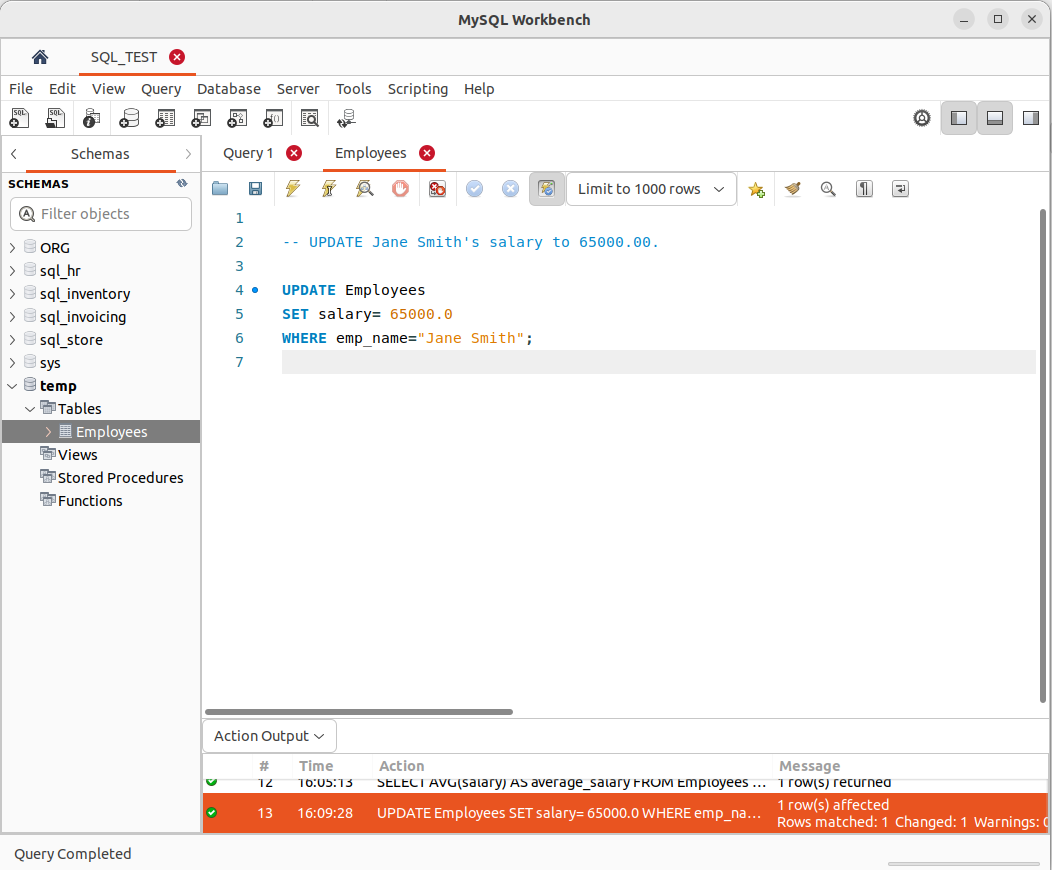
**3.Write a query to retrieve the names of all employees in the "HR" department.**



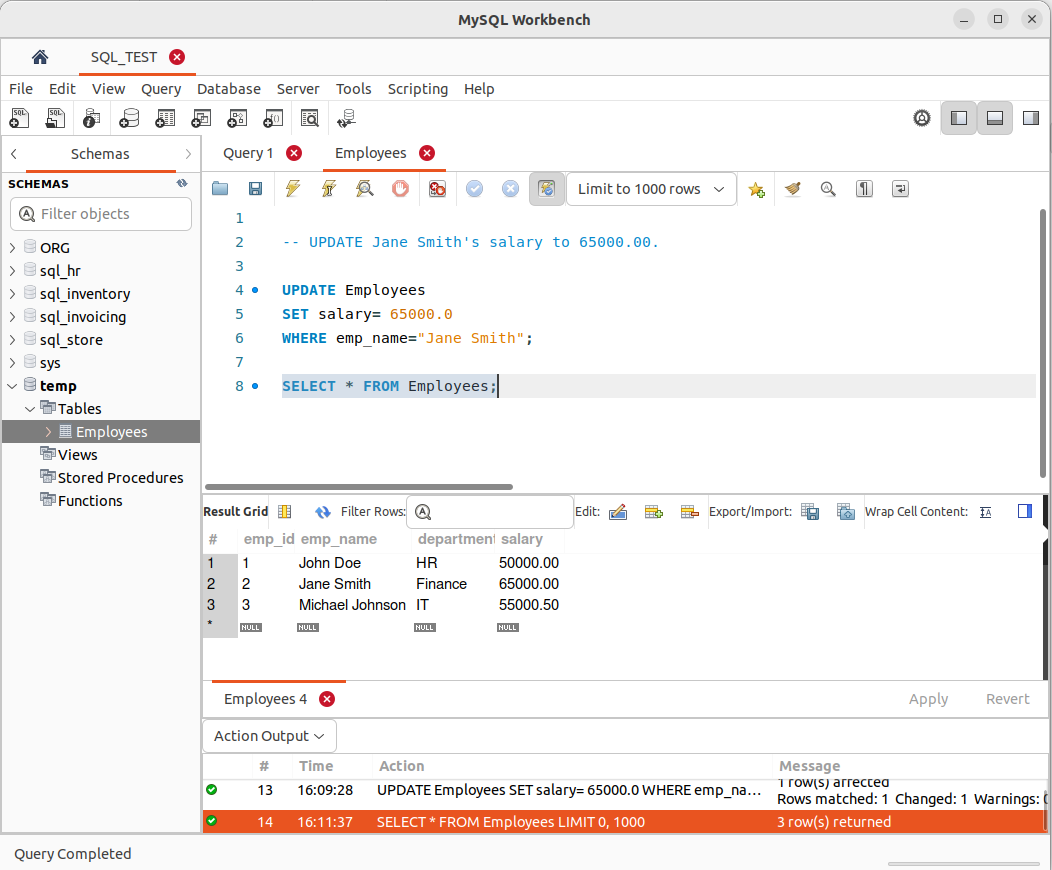
**4.Calculate the average salary of all employees.**



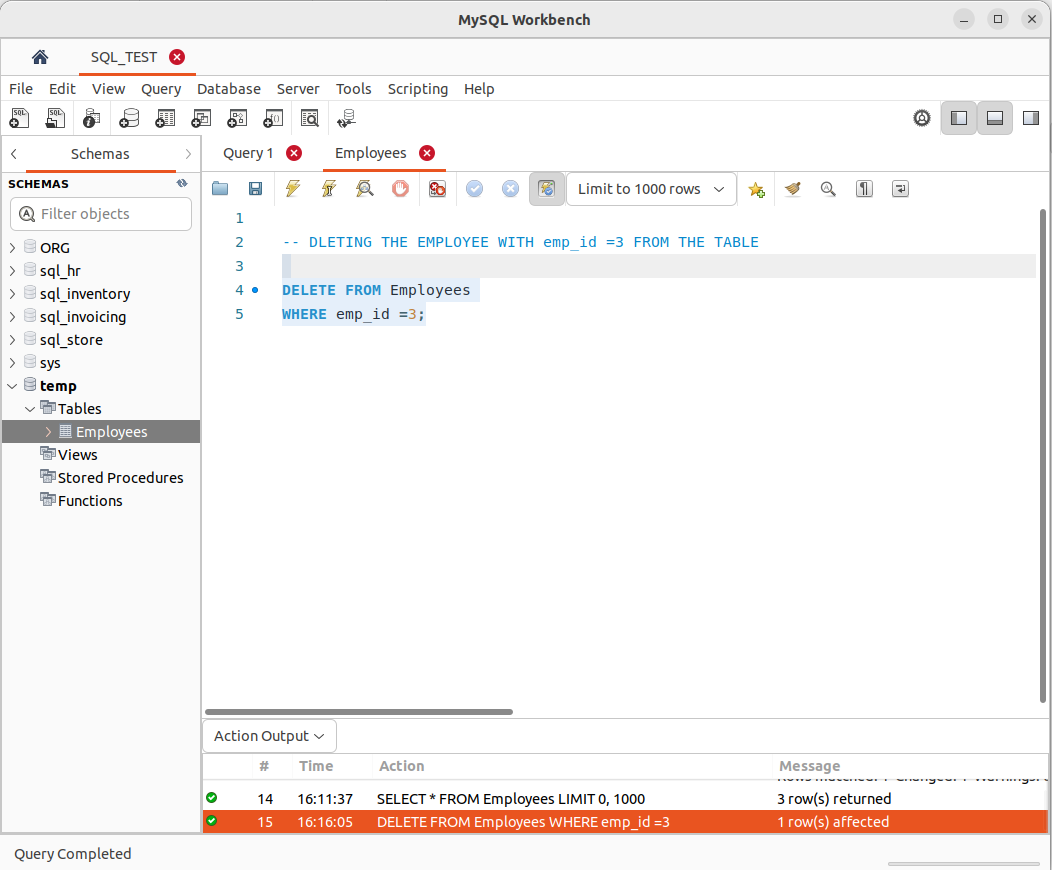
**5.Update Jane Smith's salary to 65000.00.**

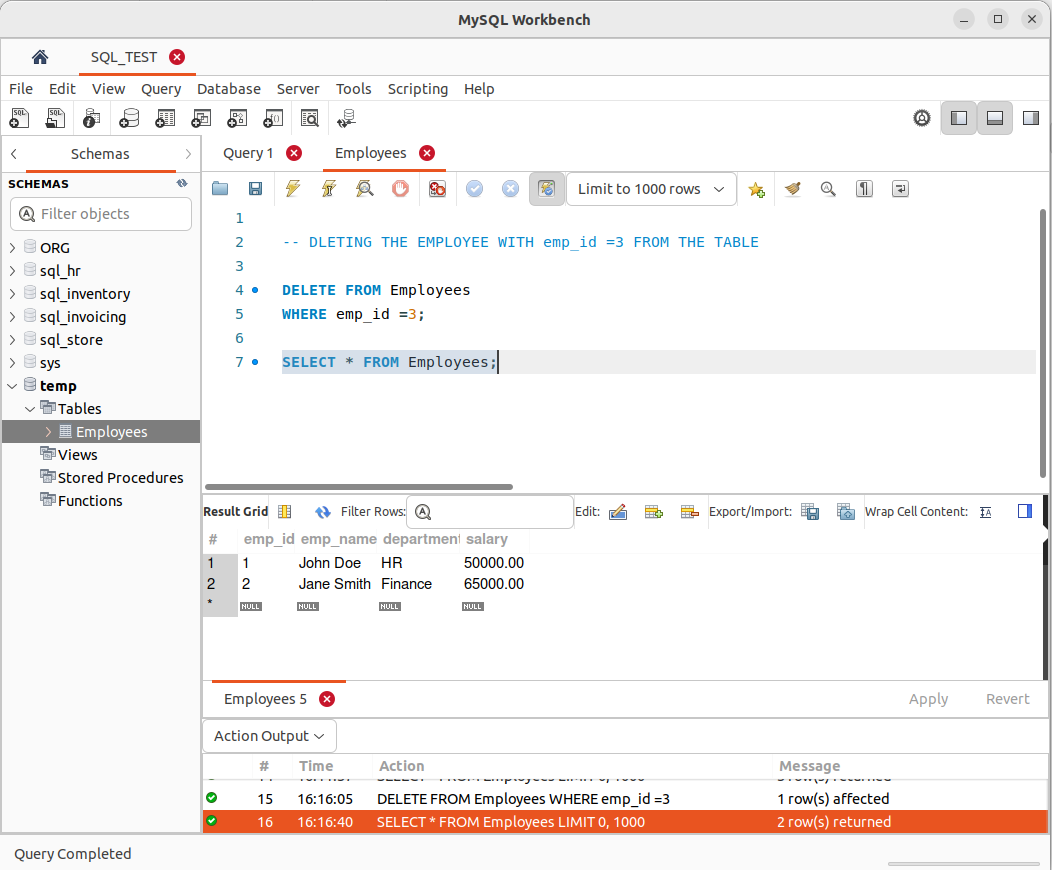
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verifying that Jane Smith salary is updated to 65000.00 :

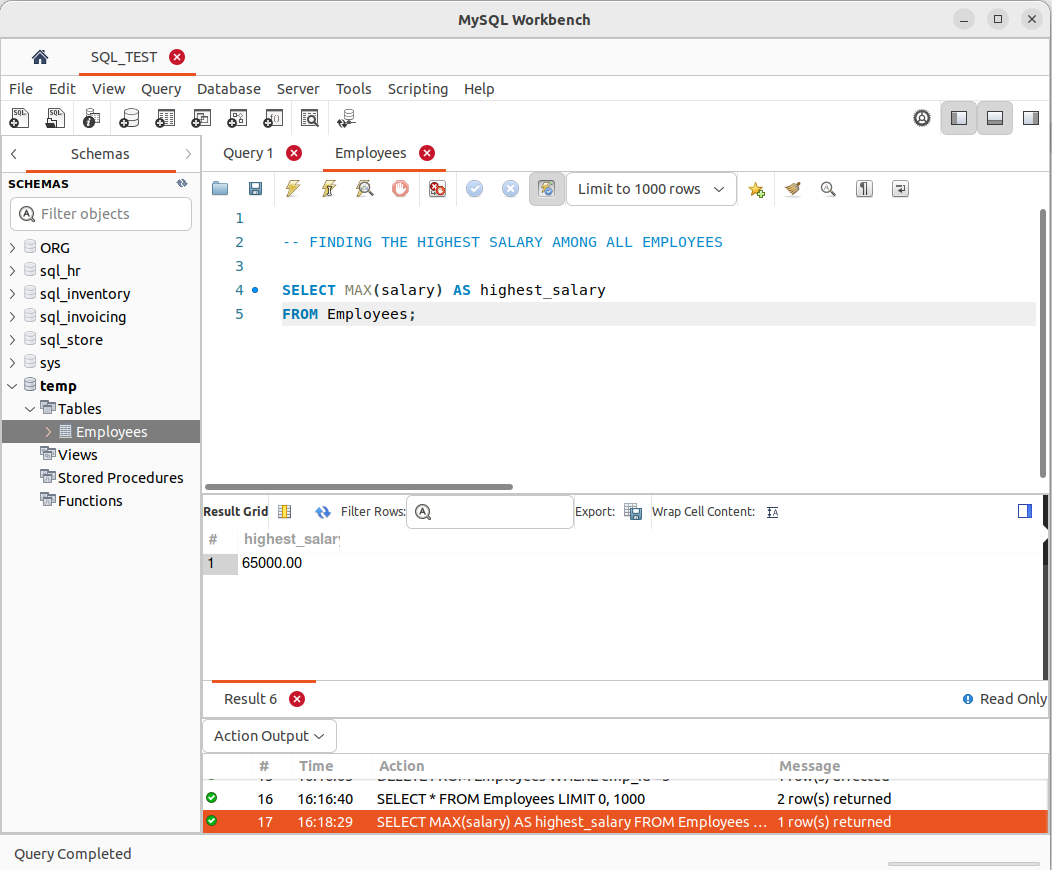


**6.Delete the employee with emp\_id = 3 from the table.**

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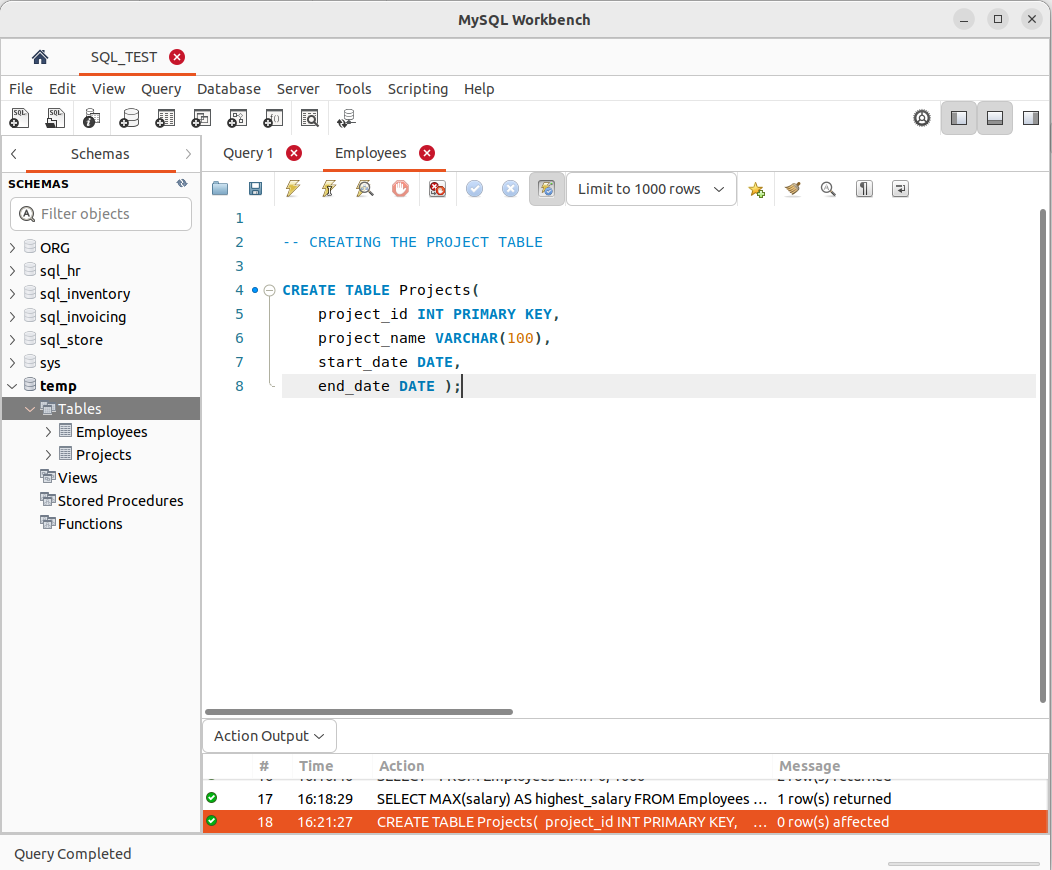


**7.Write a query to find the highest salary among all employees.**



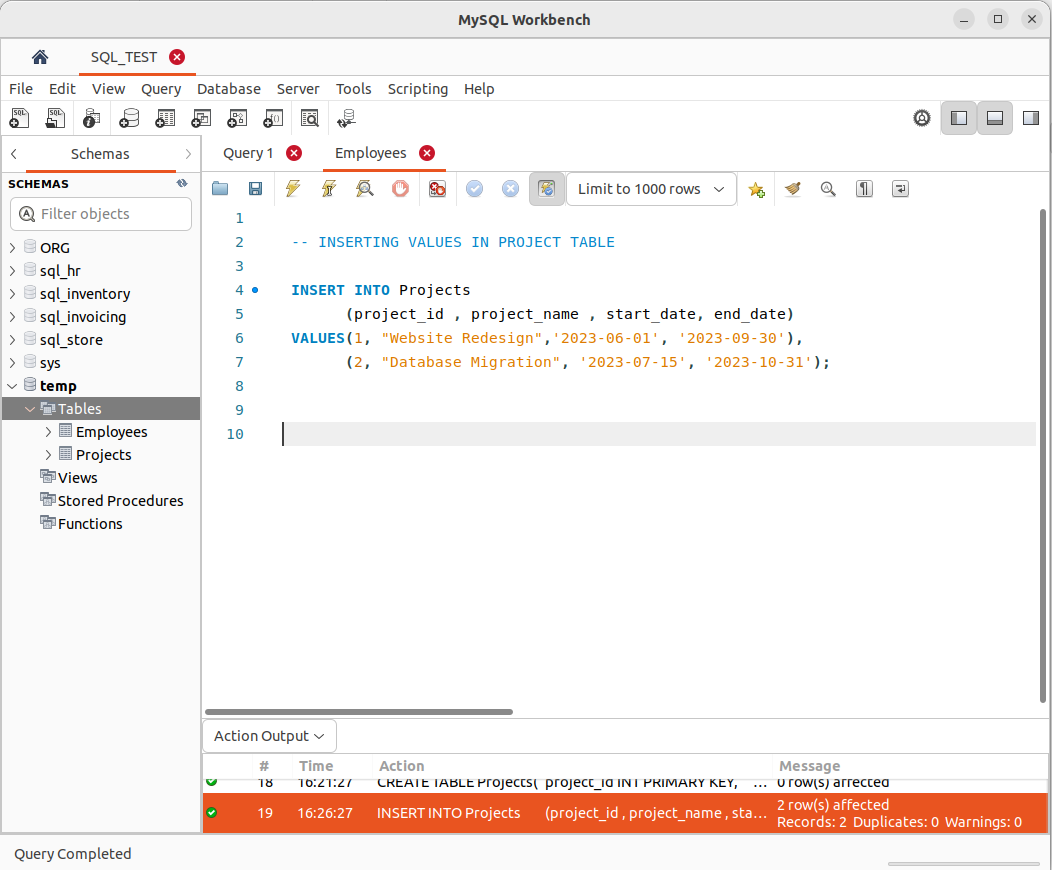
**8. Create a new table named "Projects" with the following columns:**

* project\_id (integer, primary key)
* project\_name (varchar, maximum length of 100)
* start\_date (date)
* end\_date (date)



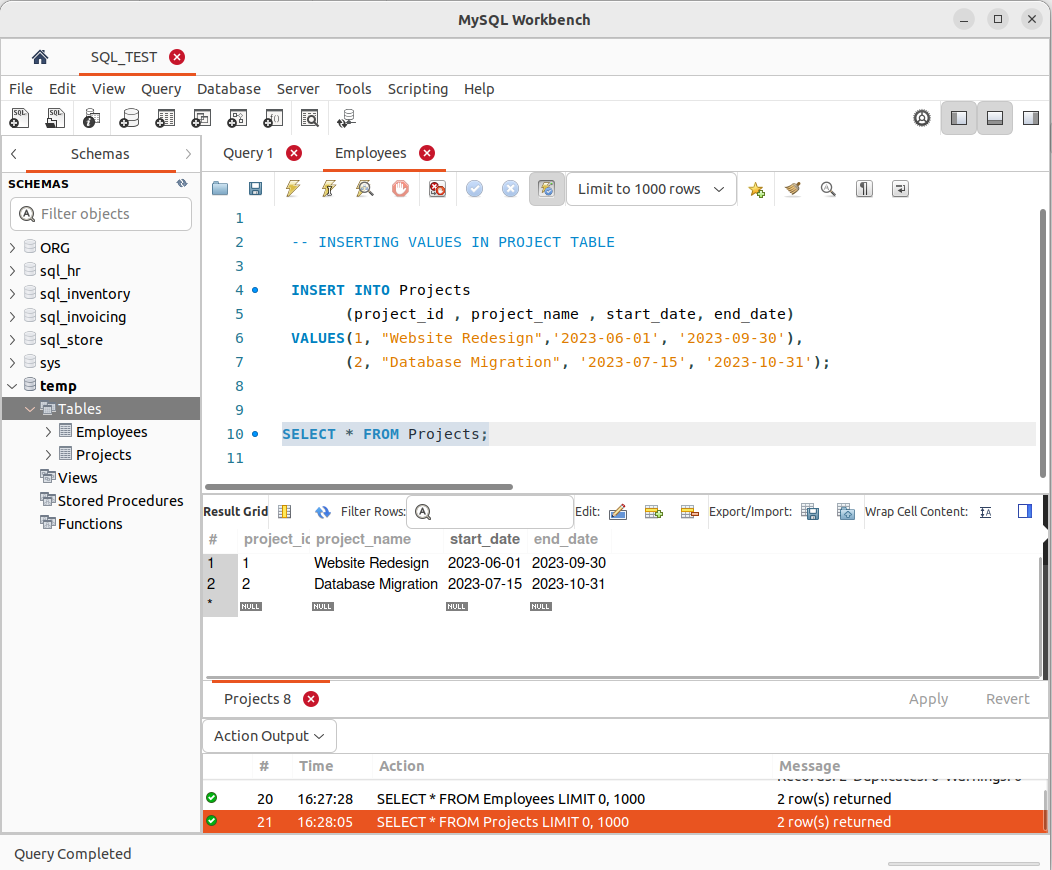
**9. Insert the following data into the "Projects" table:**

* project\_id: 1, project\_name: "Website Redesign", start\_date: '2023-06-01', end\_date: '2023-09-30'
* project\_id: 2, project\_name: "Database Migration", start\_date: '2023-07-15', end\_date: '2023-10-31'



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verifying that values are inserted into project table :

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**10. Write a query to find all employees and their corresponding project names (if any). Display all employees, even if they are not assigned to any project.**