26-06-2025

# SQL Assignment

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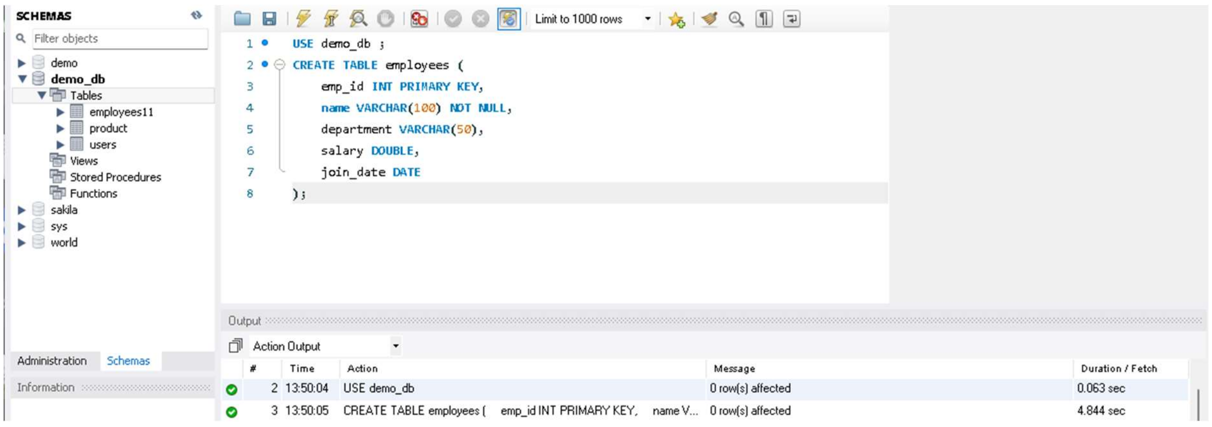
## 1) <u>CREATING TABLE</u>

```
CREATE TABLE employees (
    emp_id INT PRIMARY KEY,
    name VARCHAR(100) NOT NULL,
    department VARCHAR(50),
    salary DOUBLE,
    join_date DATE
```



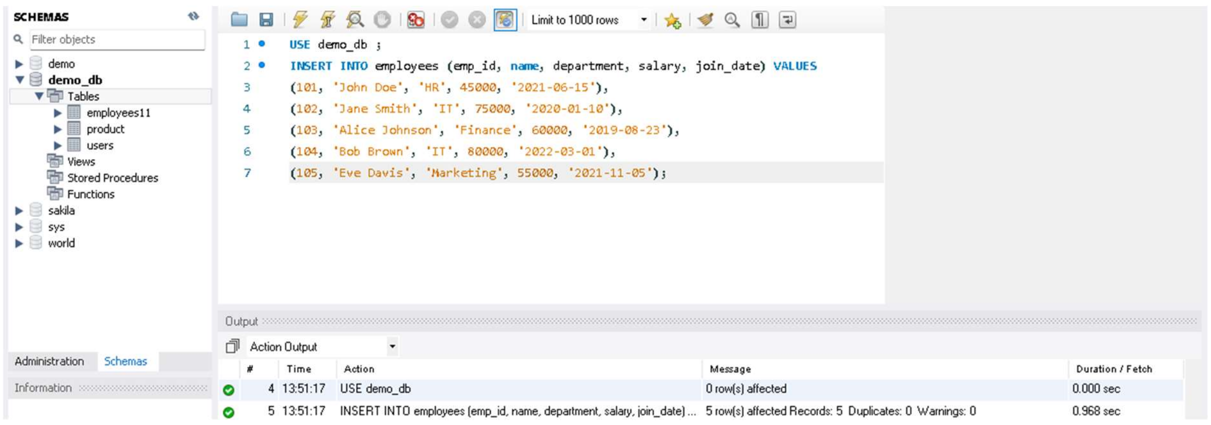
```
USE demo_db ;
CREATE TABLE employees (
    emp_id INT PRIMARY KEY,
    name VARCHAR(100) NOT NULL,
    department VARCHAR(50),
    salary DOUBLE,
    join_date DATE
);
```

```
   #  Time      Action                                                    Message            Duration / Fetch
   2  13:50:04  USE demo_db                                               0 row(s) affected  0.063 sec
   3  13:50:05  CREATE TABLE employees (   emp_id INT PRIMARY KEY,   name V...  0 row(s) affected  4.844 sec
```

## 2) <u>INSERT QUERY</u>

```
INSERT INTO employees (emp_id, name, department, salary, join_date) VALUES
(101, 'John Doe', 'HR', 45000, '2021-06-15'),
(102, 'Jane Smith', 'IT', 75000, '2020-01-10'),
(103, 'Alice Johnson', 'Finance', 60000, '2019-08-23'),
(104, 'Bob Brown', 'IT', 80000, '2022-03-01'),
```

(105, 'Eve Davis', 'Marketing', 55000, '2021-11-05');

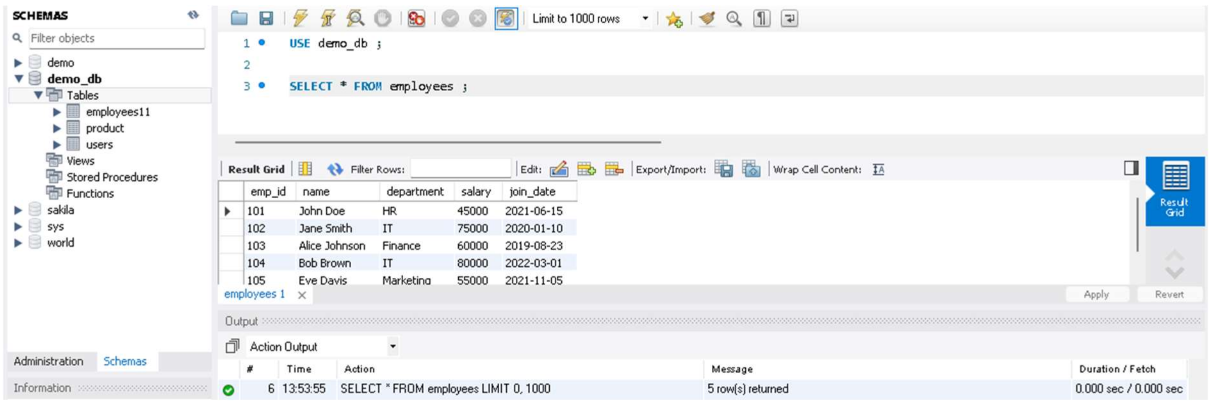


```sql
USE demo_db ;
INSERT INTO employees (emp_id, name, department, salary, join_date) VALUES
(101, 'John Doe', 'HR', 45000, '2021-06-15'),
(102, 'Jane Smith', 'IT', 75000, '2020-01-10'),
(103, 'Alice Johnson', 'Finance', 60000, '2019-08-23'),
(104, 'Bob Brown', 'IT', 80000, '2022-03-01'),
(105, 'Eve Davis', 'Marketing', 55000, '2021-11-05');
```

```
#  Time      Action                                                               Message                                                       Duration / Fetch
4  13:51:17  USE demo_db                                                          0 row(s) affected                                             0.000 sec
5  13:51:17  INSERT INTO employees (emp_id, name, department, salary, join_date) ... 5 row(s) affected Records: 5  Duplicates: 0  Warnings: 0   0.968 sec
```

## 3) **SELECT QUERY**

- SELECT * FROM employees;

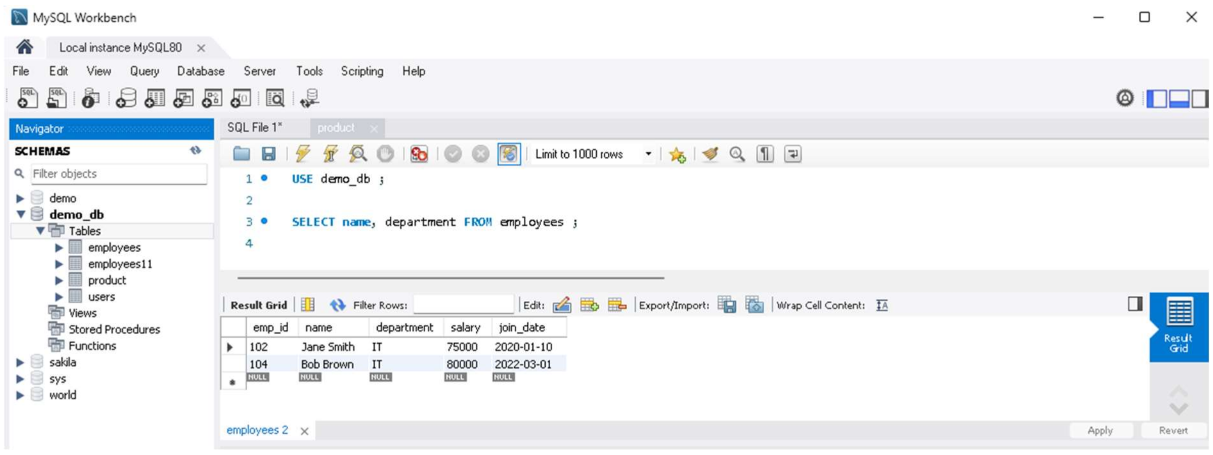


```sql
USE demo_db ;

SELECT * FROM employees ;
```

| emp_id | name | department | salary | join_date |
|---|---|---|---|---|
| 101 | John Doe | HR | 45000 | 2021-06-15 |
| 102 | Jane Smith | IT | 75000 | 2020-01-10 |
| 103 | Alice Johnson | Finance | 60000 | 2019-08-23 |
| 104 | Bob Brown | IT | 80000 | 2022-03-01 |
| 105 | Eve Davis | Marketing | 55000 | 2021-11-05 |

```
#  Time      Action                                   Message            Duration / Fetch
6  13:53:55  SELECT * FROM employees LIMIT 0, 1000    5 row(s) returned  0.000 sec / 0.000 sec
```

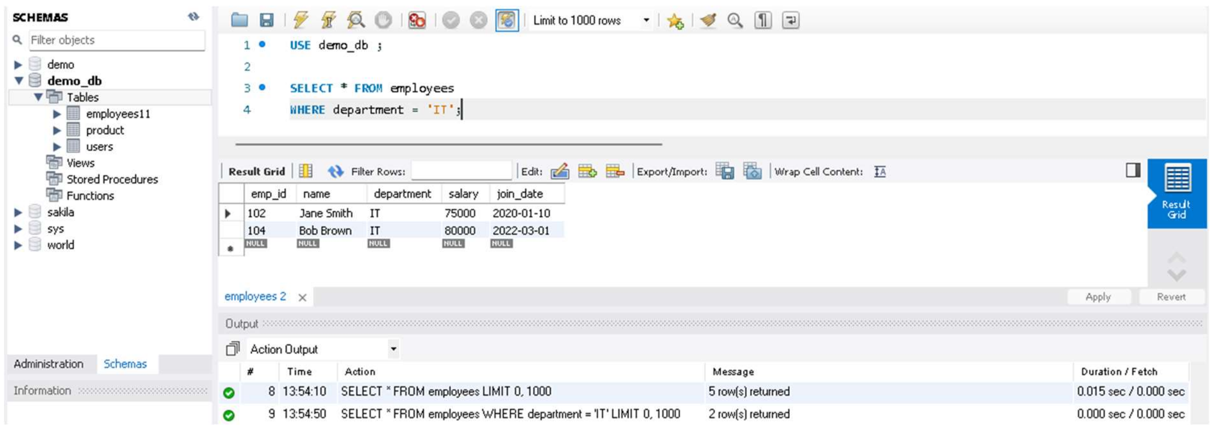
- SELECT name, department FROM employees;

- 

```
USE demo_db ;

SELECT name, department FROM employees ;
```

```
emp_id  name        department  salary  join_date
102     Jane Smith  IT          75000   2020-01-10
104     Bob Brown   IT          80000   2022-03-01
NULL    NULL        NULL        NULL    NULL
```

- SELECT * FROM employees WHERE department = 'IT';

- 

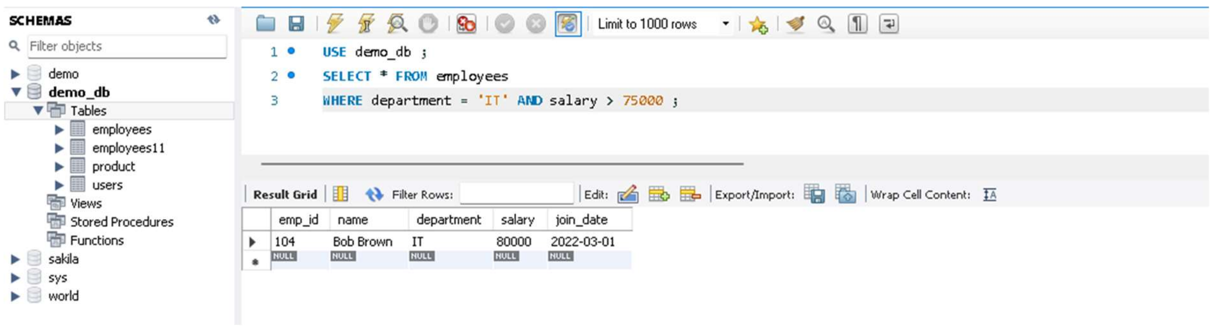
```
USE demo_db ;

SELECT * FROM employees
WHERE department = 'IT';
```

```
emp_id  name        department  salary  join_date
102     Jane Smith  IT          75000   2020-01-10
104     Bob Brown   IT          80000   2022-03-01
NULL    NULL        NULL        NULL    NULL
```

```
#  Time      Action                                                    Message             Duration / Fetch
8  13:54:10  SELECT * FROM employees LIMIT 0, 1000                     5 row(s) returned   0.015 sec / 0.000 sec
9  13:54:50  SELECT * FROM employees WHERE department = 'IT' LIMIT 0, 1000   2 row(s) returned   0.000 sec / 0.000 sec
```

## 4) AND, IN BETWEEN & LIKE

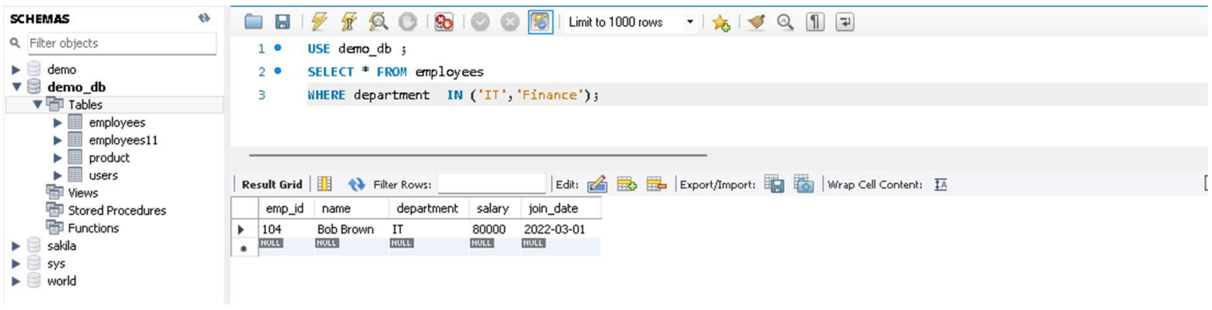
- SELECT * FROM employees WHERE department = 'IT' AND salary > 75000;

- 

```
USE demo_db ;
SELECT * FROM employees
WHERE department = 'IT' AND salary > 75000 ;
```

```
emp_id  name       department  salary  join_date
104     Bob Brown  IT          80000   2022-03-01
NULL    NULL       NULL        NULL    NULL
```

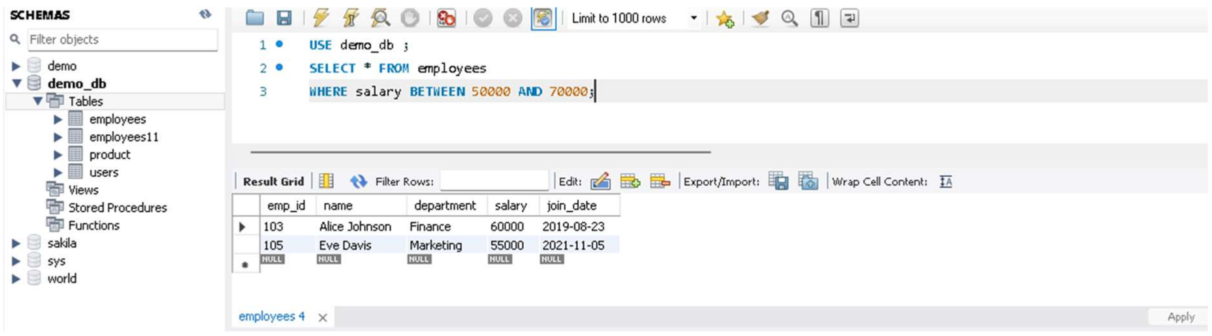
- SELECT * FROM employees WHERE department IN ('IT', 'Finance');



```sql
USE demo_db ;
SELECT * FROM employees
WHERE department  IN ('IT','Finance');
```

| emp_id | name | department | salary | join_date |
|---|---|---|---|---|
| 104 | Bob Brown | IT | 80000 | 2022-03-01 |
| NULL | NULL | NULL | NULL | NULL |

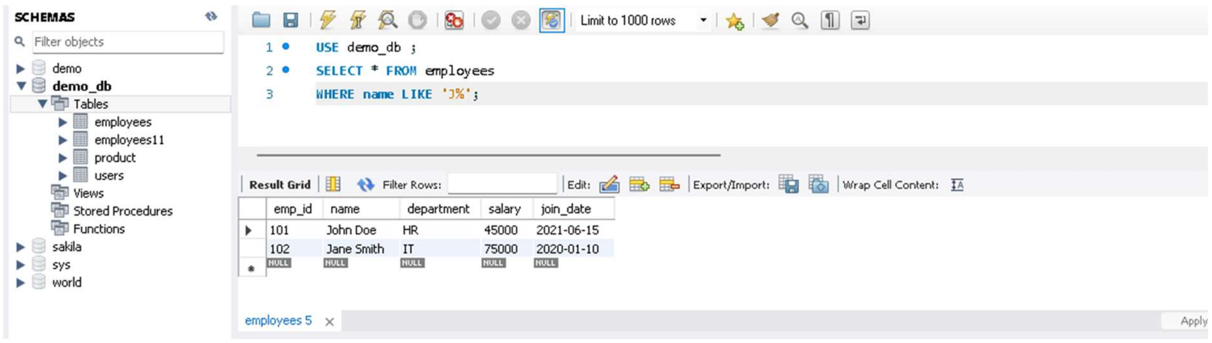
- SELECT * FROM employees WHERE salary BETWEEN 50000 AND 70000;



```sql
USE demo_db ;
SELECT * FROM employees
WHERE salary BETWEEN 50000 AND 70000;
```

| emp_id | name | department | salary | join_date |
|---|---|---|---|---|
| 103 | Alice Johnson | Finance | 60000 | 2019-08-23 |
| 105 | Eve Davis | Marketing | 55000 | 2021-11-05 |
| NULL | NULL | NULL | NULL | NULL |

- SELECT * FROM employees WHERE name LIKE 'J%';  -- Names starting with J



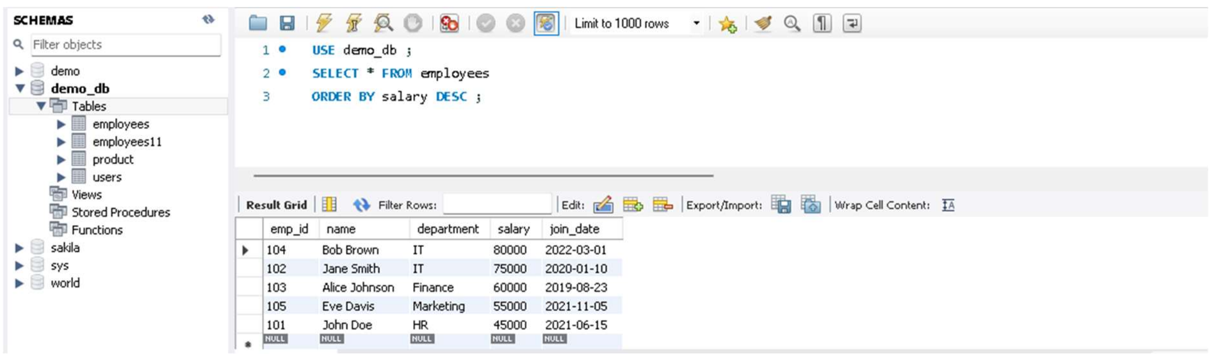
```sql
USE demo_db ;
SELECT * FROM employees
WHERE name LIKE 'J%';
```

| emp_id | name | department | salary | join_date |
|---|---|---|---|---|
| 101 | John Doe | HR | 45000 | 2021-06-15 |
| 102 | Jane Smith | IT | 75000 | 2020-01-10 |
| NULL | NULL | NULL | NULL | NULL |

## 5) **CLAUSE -ORDER BY, WHERE, HAVING**

SELECT * FROM employees

ORDER BY salary DESC;

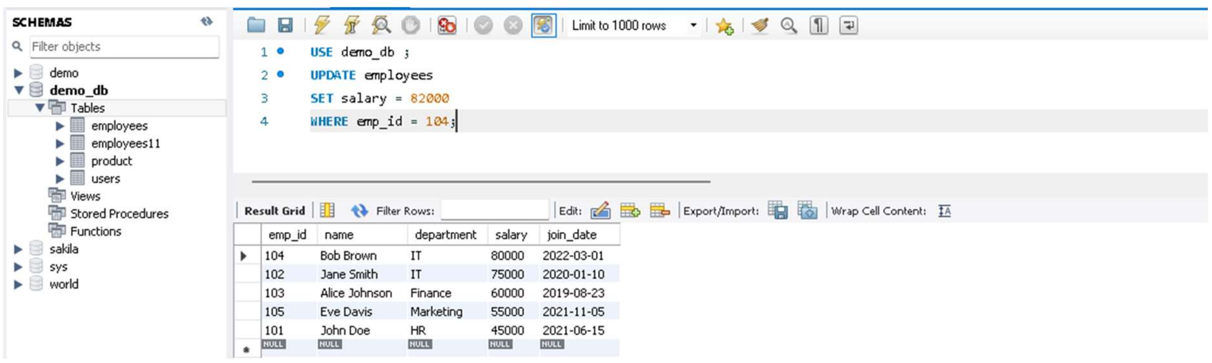


```
USE demo_db ;
SELECT * FROM employees
ORDER BY salary DESC ;
```

| emp_id | name | department | salary | join_date |
|---|---|---|---|---|
| 104 | Bob Brown | IT | 80000 | 2022-03-01 |
| 102 | Jane Smith | IT | 75000 | 2020-01-10 |
| 103 | Alice Johnson | Finance | 60000 | 2019-08-23 |
| 105 | Eve Davis | Marketing | 55000 | 2021-11-05 |
| 101 | John Doe | HR | 45000 | 2021-06-15 |
| NULL | NULL | NULL | NULL | NULL |

## 6) <u>**UPDATE QUERY**</u>

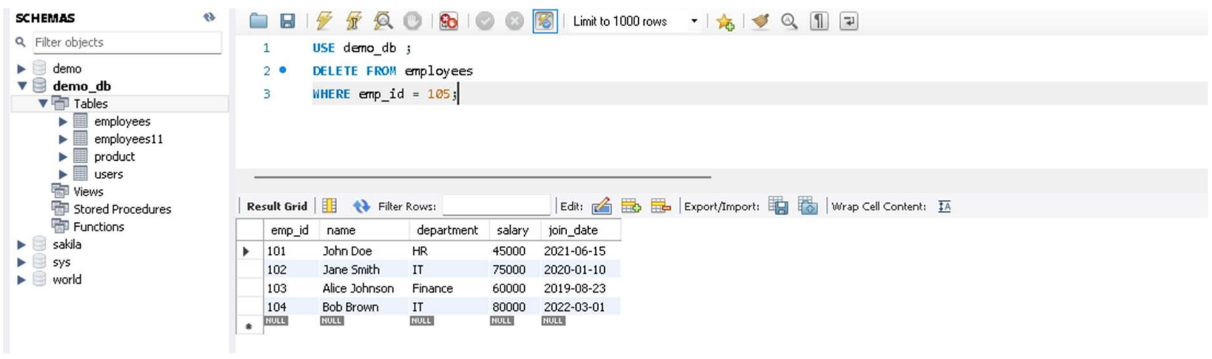
- UPDATE employees
  SET salary = 82000
  WHERE emp_id = 104;



```
USE demo_db ;
UPDATE employees
SET salary = 82000
WHERE emp_id = 104;
```

| emp_id | name | department | salary | join_date |
|---|---|---|---|---|
| 104 | Bob Brown | IT | 80000 | 2022-03-01 |
| 102 | Jane Smith | IT | 75000 | 2020-01-10 |
| 103 | Alice Johnson | Finance | 60000 | 2019-08-23 |
| 105 | Eve Davis | Marketing | 55000 | 2021-11-05 |
| 101 | John Doe | HR | 45000 | 2021-06-15 |
| NULL | NULL | NULL | NULL | NULL |

- DELETE FROM employees
  WHERE emp_id = 105;

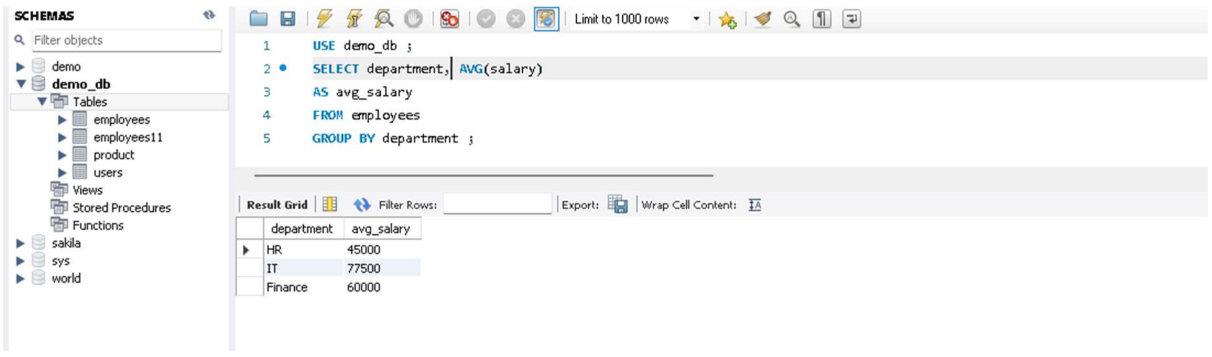


```
USE demo_db ;
DELETE FROM employees
WHERE emp_id = 105;
```

| emp_id | name | department | salary | join_date |
|---|---|---|---|---|
| 101 | John Doe | HR | 45000 | 2021-06-15 |
| 102 | Jane Smith | IT | 75000 | 2020-01-10 |
| 103 | Alice Johnson | Finance | 60000 | 2019-08-23 |
| 104 | Bob Brown | IT | 80000 | 2022-03-01 |
| NULL | NULL | NULL | NULL | NULL |

- SELECT department, AVG(salary) AS avg_salary

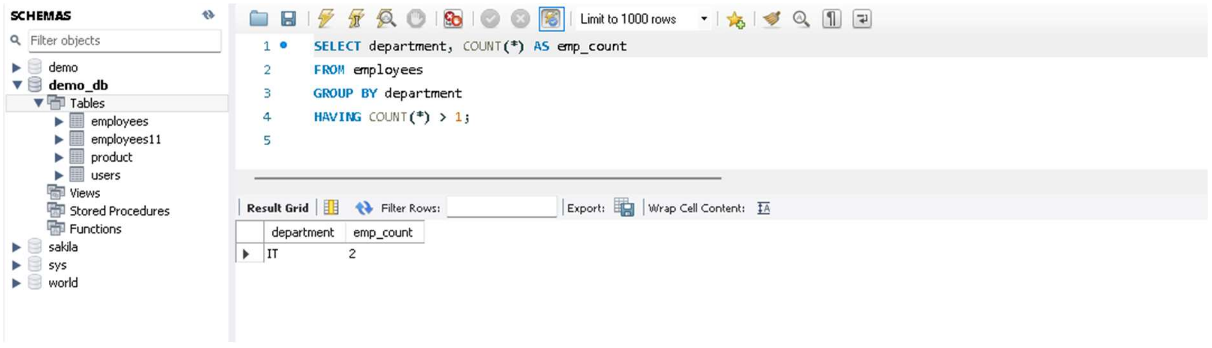
FROM employees
GROUP BY department;



```sql
USE demo_db ;
SELECT department, AVG(salary)
AS avg_salary
FROM employees
GROUP BY department ;
```

| department | avg_salary |
|---|---|
| HR | 45000 |
| IT | 77500 |
| Finance | 60000 |

- SELECT department, COUNT(*) AS emp_count
  FROM employees
  GROUP BY department
  HAVING COUNT(*) > 1;



```sql
SELECT department, COUNT(*) AS emp_count
FROM employees
GROUP BY department
HAVING COUNT(*) > 1;
```

| department | emp_count |
|---|---|
| IT | 2 |