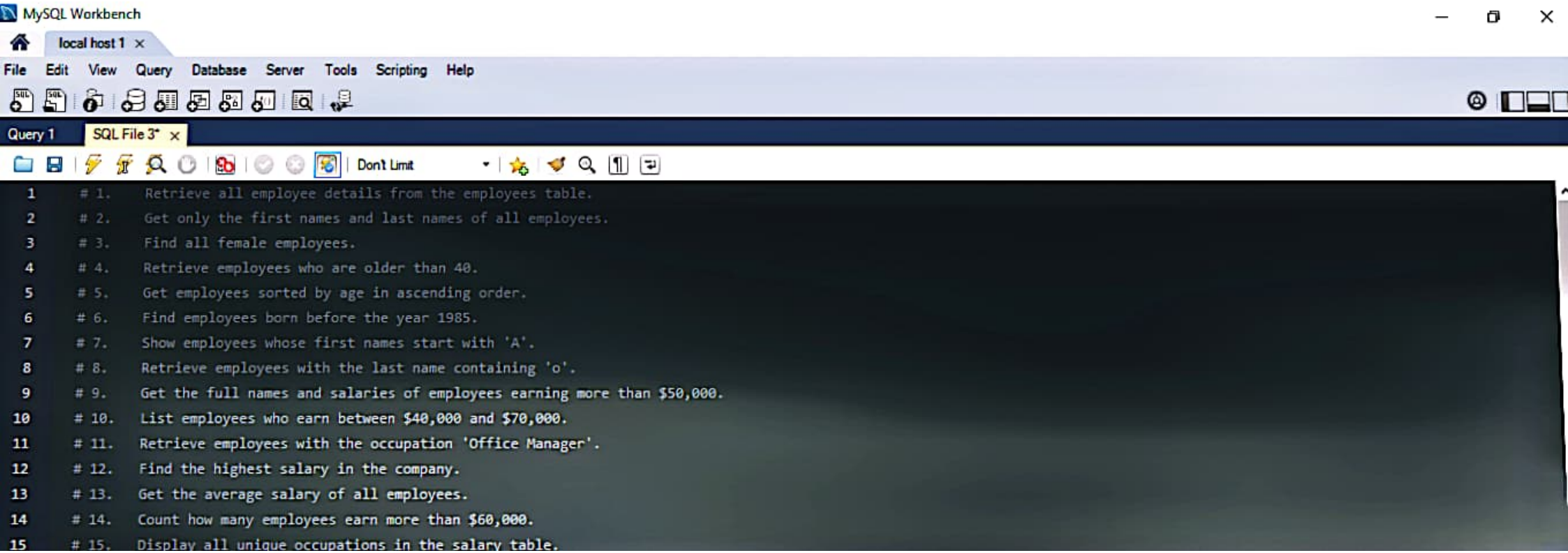
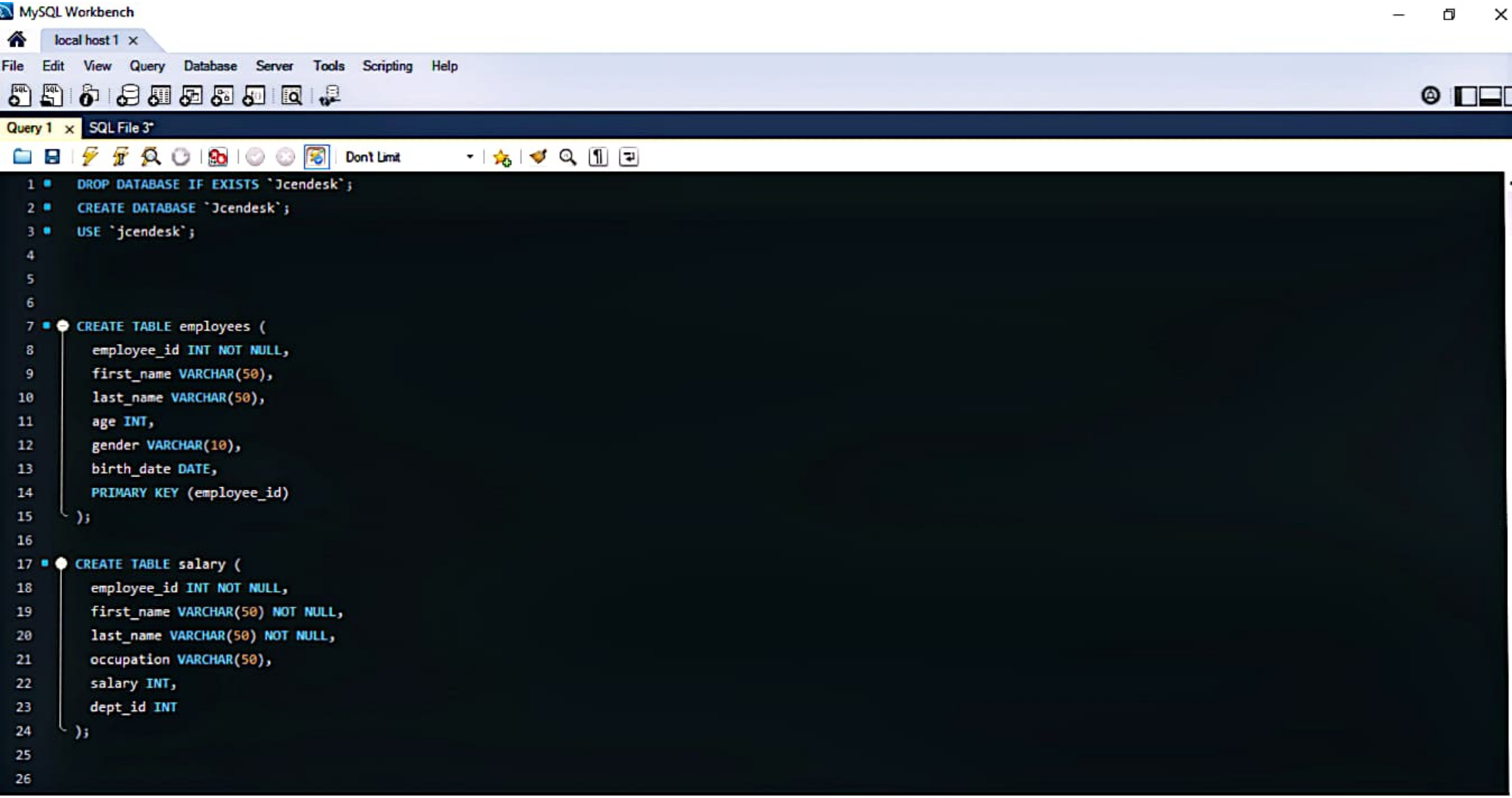
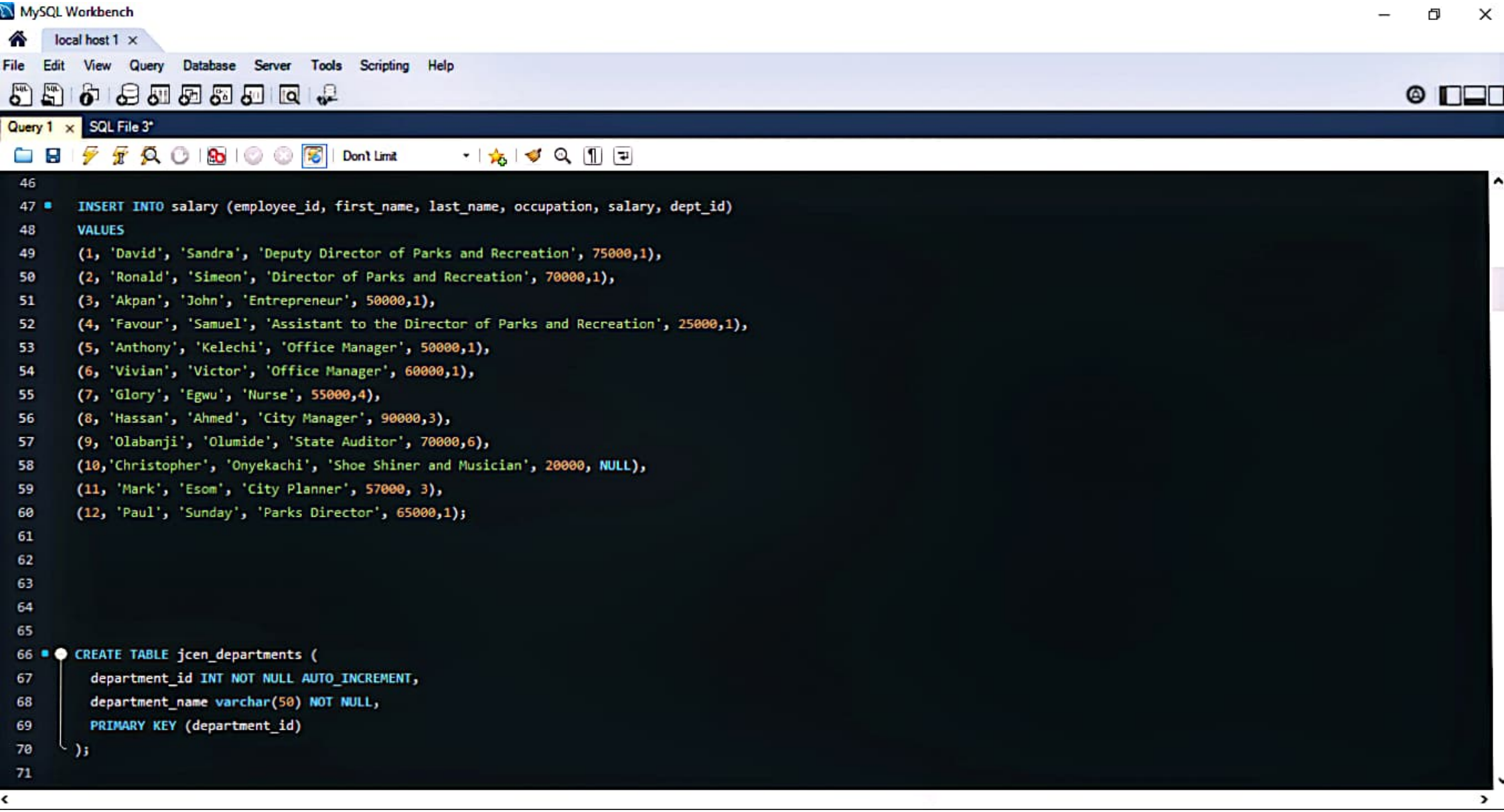
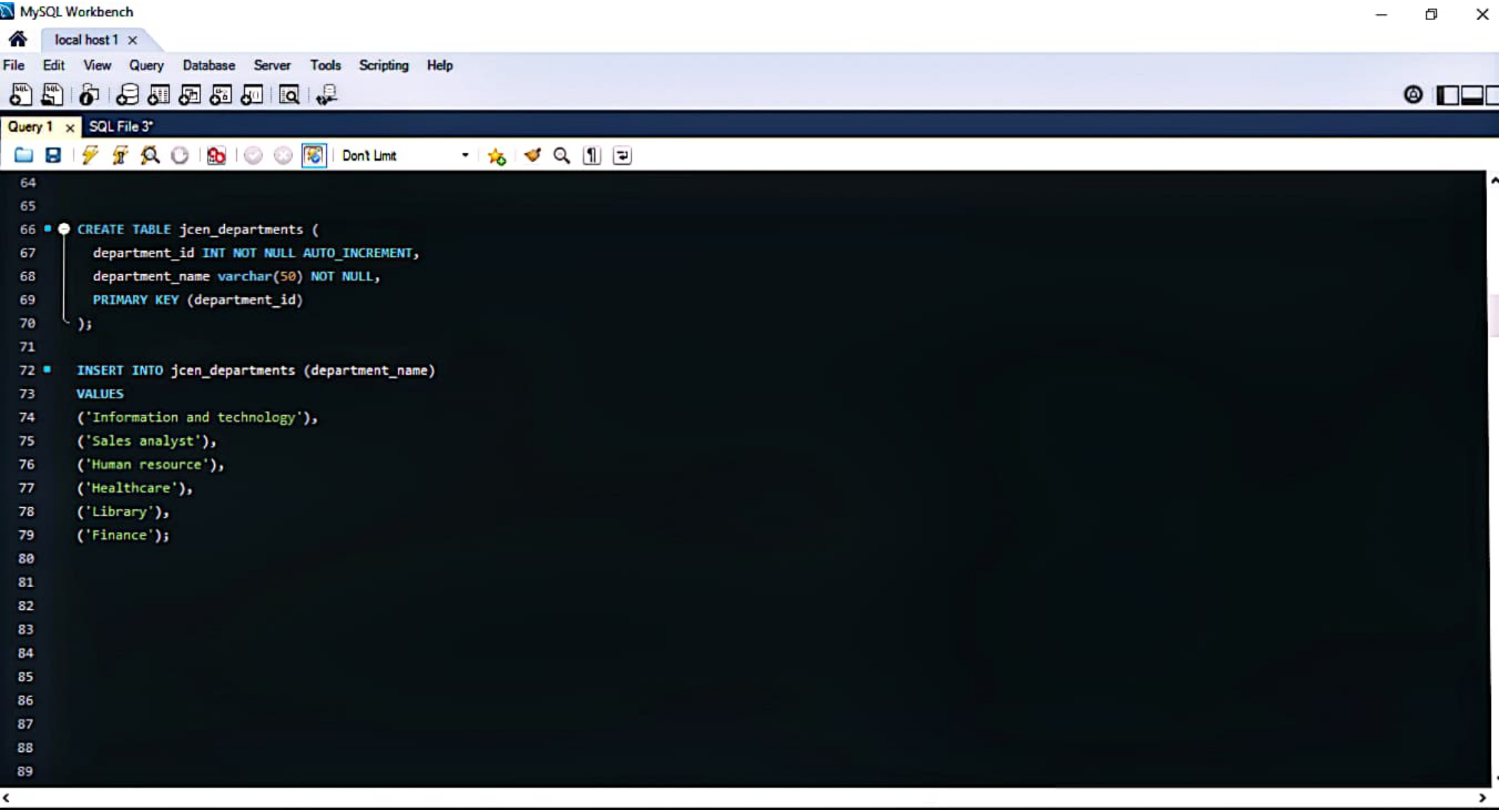

MySQL Workbench
local host 1
File Edit View Query Database Server Tools Scripting Help
Query 1
SQL File 3*
Don't Limit
1. Retrieve all employee details from the employees table.
2. Get only the first names and last names of all employees.
3. Find all female employees.
4. Retrieve employees who are older than 40.
5. Get employees sorted by age in ascending order.
6. Find employees born before the year 1985.
7. Show employees whose first names start with 'A'.
8. Retrieve employees with the last name containing 'o'.
9. Get the full names and salaries of employees earning more than $50,000.
10. List employees who earn between $40,000 and $70,000.
11. Retrieve employees with the occupation 'Office Manager'.
12. Find the highest salary in the company.
13. Get the average salary of all employees.
14. Count how many employees earn more than $60,000.
15. Display all unique occupations in the salary table.

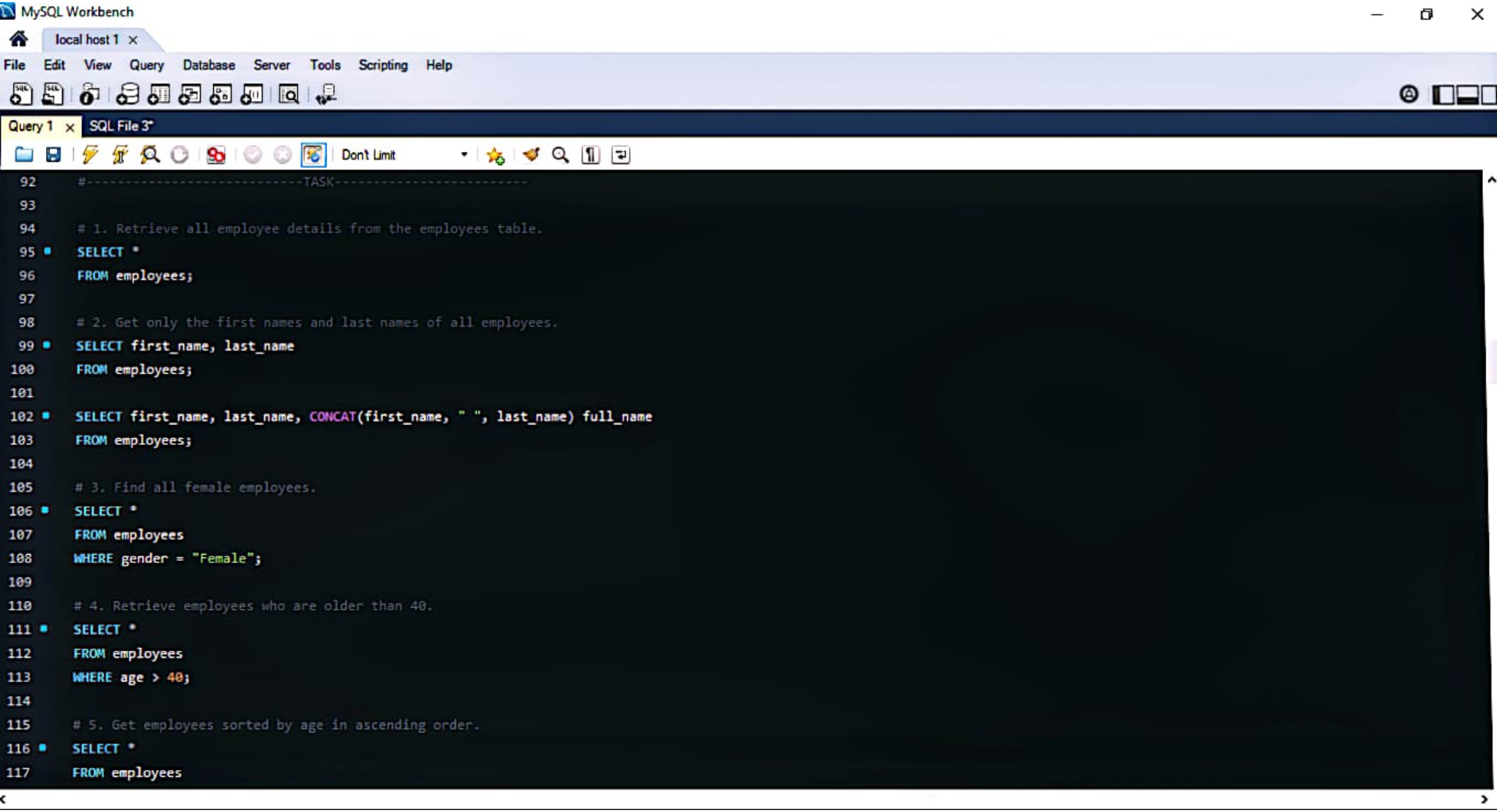
```
16  # 16.  Retrieve the full names, occupations, and salaries of all employees.
17  # 17.  Find employees who work in the 'Information and Technology' department.
18  # 18.  Get employees' department names along with their salaries.
19  # 19.  Show employees who do not have a department assigned (NULL values in dept_id).
20  # 20.  Find employees and their corresponding birth dates along with their salaries.
21  # 21.  Count the total number of male employees.
22  # 22.  Find the total number of employees in each department.
23  # 23.  Retrieve the youngest and oldest employee from the database.
24  # 24.  Get the total salary being paid to all employees.
25  # 25.  Show the department with the highest number of employees.
26  # 26.  Find employees who have the same first name.
27  # 27.  Retrieve employees whose salaries are below the company's average salary.
28  # 28.  Count how many employees have each occupation.
29  # 29.  Show all employees grouped by gender, along with the number of employees in each gender.
30  # 30.  Find the department(s) where the total salary is above $150,000.
31
```


MySQL Workbench
local host 1
File Edit View Query Database Server Tools Scripting Help
Query 1
SQL File 3*
Don't Limit
DROP DATABASE IF EXISTS `Jcendesk`;
CREATE DATABASE `Jcendesk`;
USE `jcendesk`;
CREATE TABLE employees (
employee_id INT NOT NULL,
first_name VARCHAR(50),
last_name VARCHAR(50),
age INT,
gender VARCHAR(10),
birth_date DATE,
PRIMARY KEY (employee_id)
);
CREATE TABLE salary (
employee_id INT NOT NULL,
first_name VARCHAR(50) NOT NULL,
last_name VARCHAR(50) NOT NULL,
occupation VARCHAR(50),
salary INT,
dept_id INT
);

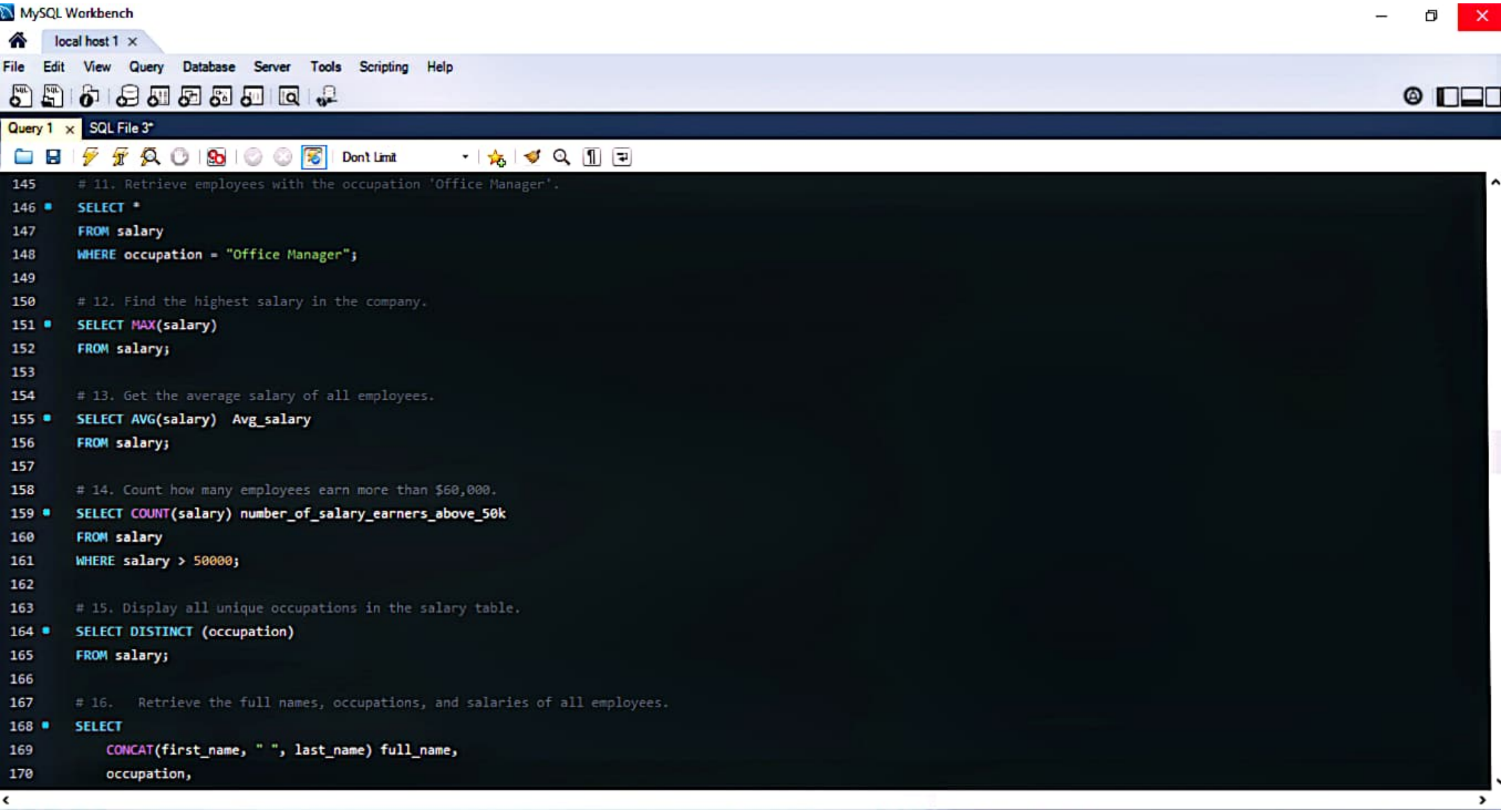
```
    dept_id INT
);


INSERT INTO employees (employee_id, first_name, last_name, age, gender, birth_date)
VALUES
(1,'David', 'Sandra', 44, 'Female','1979-09-25'),
(3,'Akpan', 'John', 36, 'Male', '1987-03-04'),
(4, 'Favour', 'Samuel', 29, 'Female', '1994-03-27'),
(5, 'Anthony', 'Kelechi', 61, 'Male', '1962-08-28'),
(6, 'Vivian', 'Victor', 46, 'Female', '1977-07-30'),
(7, 'Glory', 'Egwu', 35, 'Female', '1988-12-01'),
(8, 'Hassan', 'Ahmed', 43, 'Male', '1980-11-11'),
(9, 'Olabanji', 'Olumide', 38, 'Male', '1985-07-26'),
(10, 'Christopher', 'Onyekachi', 34, 'Male', '1989-03-25'),
(11, 'Mark', 'Esom', 40, 'Male', '1983-06-14'),
(12, 'Paul', 'Sunday', 37, 'Male', '1986-07-27');



INSERT INTO salary (employee_id, first_name, last_name, occupation, salary, dept_id)
VALUES
```

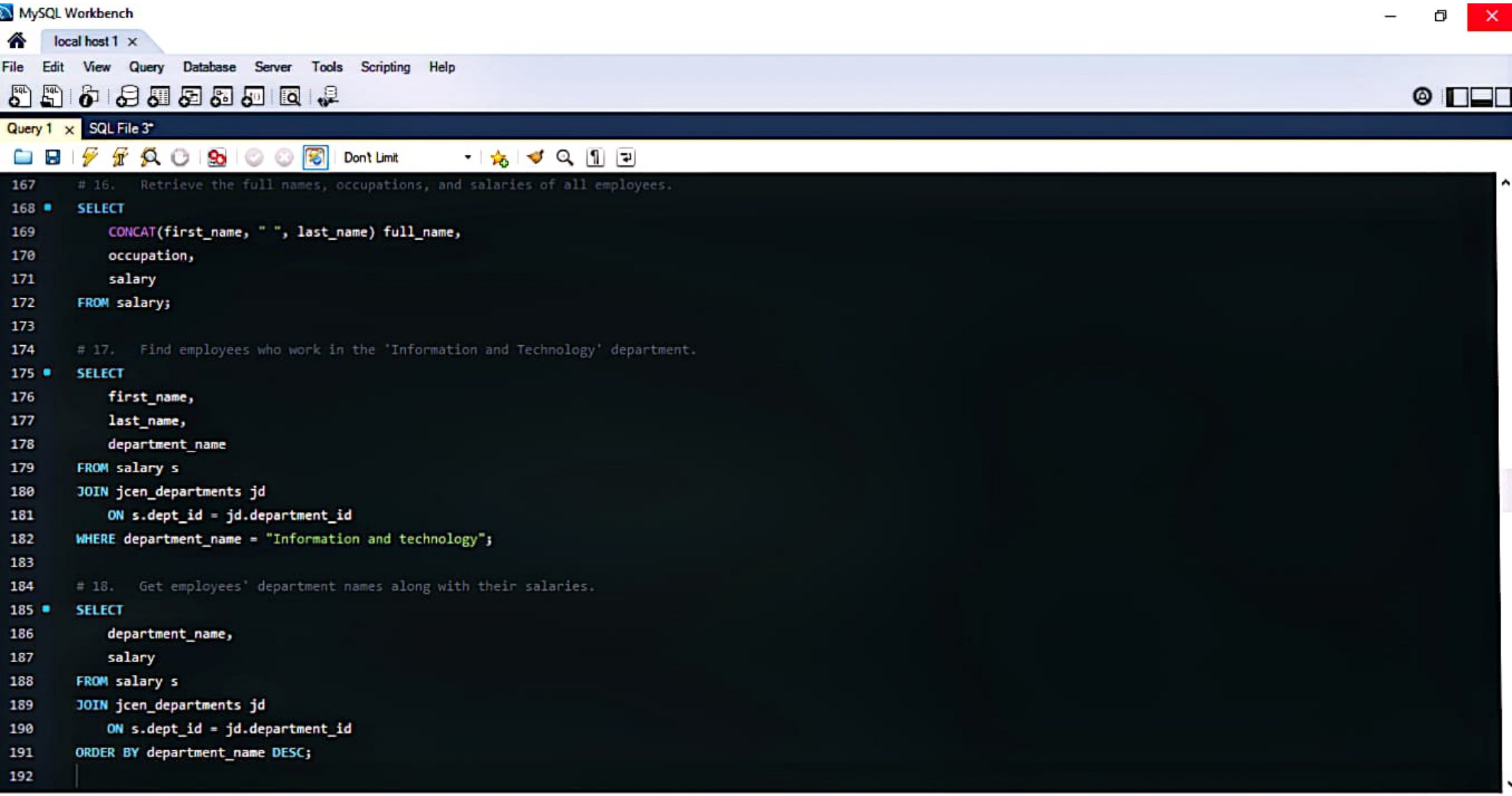

MySQL Workbench
local host 1
File Edit View Query Database Server Tools Scripting Help
Query 1
SQL File 3*
Don't Limit
INSERT INTO salary (employee_id, first_name, last_name, occupation, salary, dept_id)
VALUES
(1, 'David', 'Sandra', 'Deputy Director of Parks and Recreation', 75000,1),
(2, 'Ronald', 'Simeon', 'Director of Parks and Recreation', 70000,1),
(3, 'Akpan', 'John', 'Entrepreneur', 50000,1),
(4, 'Favour', 'Samuel', 'Assistant to the Director of Parks and Recreation', 25000,1),
(5, 'Anthony', 'Kelechi', 'Office Manager', 50000,1),
(6, 'Vivian', 'Victor', 'Office Manager', 60000,1),
(7, 'Glory', 'Egwu', 'Nurse', 55000,4),
(8, 'Hassan', 'Ahmed', 'City Manager', 90000,3),
(9, 'Olabanji', 'Olumide', 'State Auditor', 70000,6),
(10,'Christopher', 'Onyekachi', 'Shoe Shiner and Musician', 20000, NULL),
(11, 'Mark', 'Esom', 'City Planner', 57000, 3),
(12, 'Paul', 'Sunday', 'Parks Director', 65000,1);
CREATE TABLE jcen_departments (
department_id INT NOT NULL AUTO_INCREMENT,
department_name varchar(50) NOT NULL,
PRIMARY KEY (department_id)
);


MySQL Workbench
local host 1
File Edit View Query Database Server Tools Scripting Help
Query 1
SQL File 3*
Don't Limit
64
65
66 CREATE TABLE jcen_departments (
67 department_id INT NOT NULL AUTO_INCREMENT,
68 department_name varchar(50) NOT NULL,
69 PRIMARY KEY (department_id)
70);
71
72 INSERT INTO jcen_departments (department_name)
73 VALUES
74 ('Information and technology'),
75 ('Sales analyst'),
76 ('Human resource'),
77 ('Healthcare'),
78 ('Library'),
79 ('Finance');
80
81
82
83
84
85
86
87
88
89

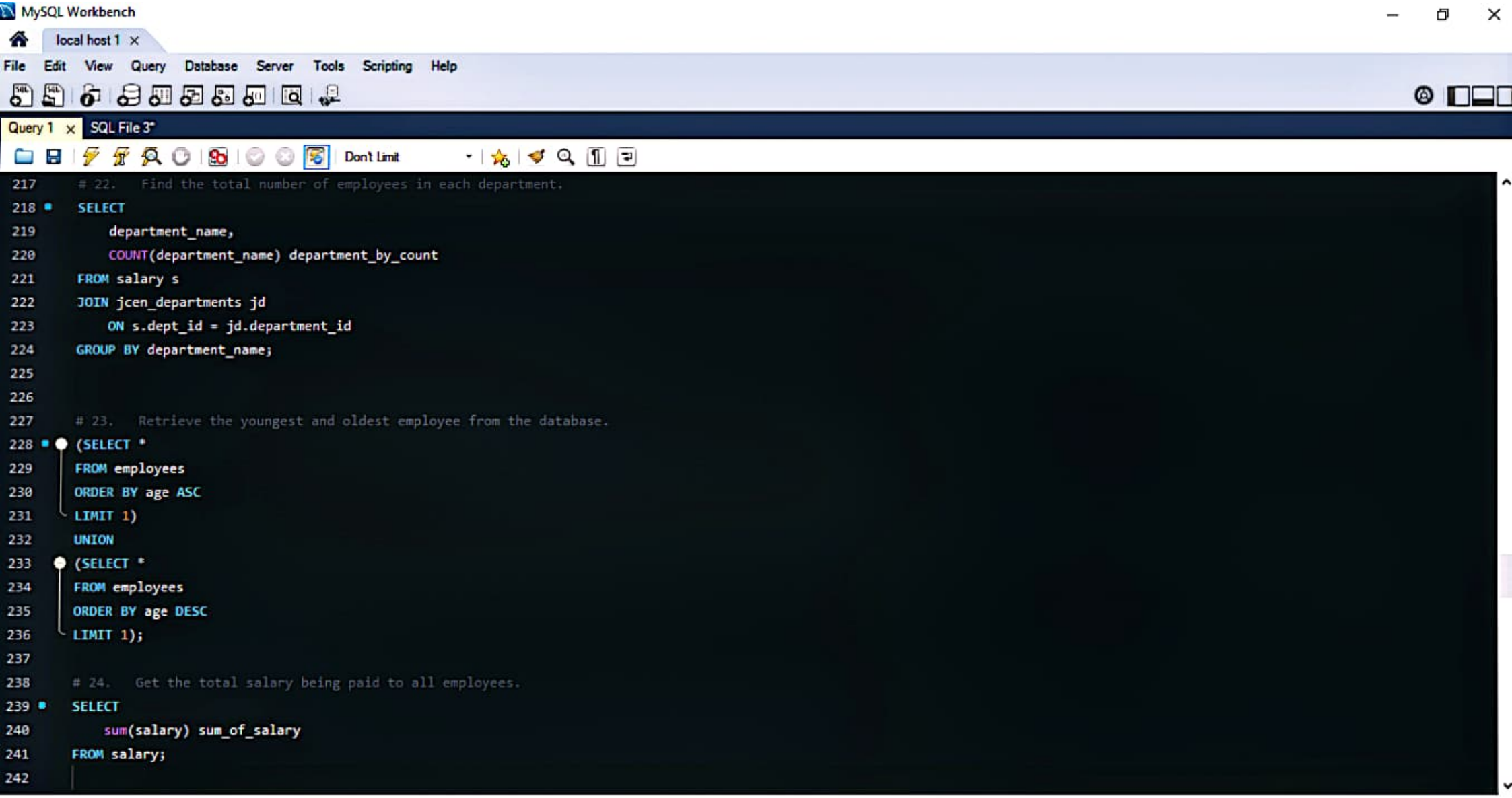

MySQL Workbench
local host 1
File Edit View Query Database Server Tools Scripting Help
Query 1
SQL File 3*
Don't Limit
92 #----------TASK----------
93
94 # 1. Retrieve all employee details from the employees table.
95 SELECT *
96 FROM employees;
97
98 # 2. Get only the first names and last names of all employees.
99 SELECT first_name, last_name
100 FROM employees;
101
102 SELECT first_name, last_name, CONCAT(first_name, " ", last_name) full_name
103 FROM employees;
104
105 # 3. Find all female employees.
106 SELECT *
107 FROM employees
108 WHERE gender = "Female";
109
110 # 4. Retrieve employees who are older than 40.
111 SELECT *
112 FROM employees
113 WHERE age > 40;
114
115 # 5. Get employees sorted by age in ascending order.
116 SELECT *
117 FROM employees

```sql
# 6. Find employees born before the year 1985.
SELECT *
FROM employees
WHERE birth_date < "1985-01-01";

# 7. Show employees whose first names start with 'A'.
SELECT *
FROM employees
WHERE first_name LIKE "A%";

# 8. Retrieve employees with the last name containing 'o'.
SELECT *
FROM employees
WHERE last_name LIKE "%o%";

# 9. Get the full names and salaries of employees earning more than $50,000.
SELECT CONCAT(first_name, " " ,last_name) Full_name, salary
FROM salary
WHERE salary > 50000;

# 10. List employees who earn between $40,000 and $70,000.
SELECT *
FROM salary
WHERE salary BETWEEN 40000 AND 70000;

# 11. Retrieve employees with the occupation 'Office Manager'.
```


MySQL Workbench
local host 1
File Edit View Query Database Server Tools Scripting Help
Query 1
SQL File 3*
Don't Limit
11. Retrieve employees with the occupation 'Office Manager'.
SELECT *
FROM salary
WHERE occupation = "Office Manager";
12. Find the highest salary in the company.
SELECT MAX(salary)
FROM salary;
13. Get the average salary of all employees.
SELECT AVG(salary) Avg_salary
FROM salary;
14. Count how many employees earn more than $60,000.
SELECT COUNT(salary) number_of_salary_earners_above_50k
FROM salary
WHERE salary > 50000;
15. Display all unique occupations in the salary table.
SELECT DISTINCT (occupation)
FROM salary;
16. Retrieve the full names, occupations, and salaries of all employees.
SELECT
CONCAT(first_name, " ", last_name) full_name,
occupation,


MySQL Workbench
local host 1
File Edit View Query Database Server Tools Scripting Help
Query 1
SQL File 3*
Don't Limit
167 # 16. Retrieve the full names, occupations, and salaries of all employees.
168 SELECT
169 CONCAT(first_name, " ", last_name) full_name,
170 occupation,
171 salary
172 FROM salary;
173
174 # 17. Find employees who work in the 'Information and Technology' department.
175 SELECT
176 first_name,
177 last_name,
178 department_name
179 FROM salary s
180 JOIN jcen_departments jd
181 ON s.dept_id = jd.department_id
182 WHERE department_name = "Information and technology";
183
184 # 18. Get employees' department names along with their salaries.
185 SELECT
186 department_name,
187 salary
188 FROM salary s
189 JOIN jcen_departments jd
190 ON s.dept_id = jd.department_id
191 ORDER BY department_name DESC;
192

```sql
# 19.   Show employees who do not have a department assigned (NULL values in dept_id).
SELECT *
FROM salary s
JOIN jcen_departments jd
    ON s.dept_id = jd.department_id
WHERE department_name IS NULL;

# 20.   Find employees and their corresponding birth dates along with their salaries.
SELECT
    CONCAT(e.first_name, " ", e.last_name) full_name,
    e.birth_date,
    s.salary
FROM employees e
JOIN salary s
    ON e.employee_id = s.employee_id;

# 21.   Count the total number of male employees.
SELECT
    gender,
    COUNT(gender) total_male
FROM employees
WHERE gender = "Male"
GROUP BY gender;

# 22.   Find the total number of employees in each department.
SELECT
```


MySQL Workbench
local host 1
File Edit View Query Database Server Tools Scripting Help
Query 1
SQL File 3*
Don't Limit
217 # 22. Find the total number of employees in each department.
218 SELECT
219 department_name,
220 COUNT(department_name) department_by_count
221 FROM salary s
222 JOIN jcen_departments jd
223 ON s.dept_id = jd.department_id
224 GROUP BY department_name;
225
226
227 # 23. Retrieve the youngest and oldest employee from the database.
228 (SELECT *
229 FROM employees
230 ORDER BY age ASC
231 LIMIT 1)
232 UNION
233 (SELECT *
234 FROM employees
235 ORDER BY age DESC
236 LIMIT 1);
237
238 # 24. Get the total salary being paid to all employees.
239 SELECT
240 sum(salary) sum_of_salary
241 FROM salary;
242

```sql
# 25.   Show the department with the highest number of employees.
SELECT
    department_name,
    COUNT(department_name) total_number
FROM salary s
JOIN jcen_departments jd
    ON s.dept_id = jd.department_id
GROUP BY department_name
ORDER BY department_name DESC
LIMIT 1;

# 26.   Find employees who have the same first name.
SELECT
    first_name,
    COUNT(*) same_first_name
FROM employees
GROUP BY first_name
HAVING COUNT(*) < 1;
# No employees has the same first_name.....

# 27.   Retrieve employees whose salaries are below the company's average salary.
SELECT *
FROM salary
WHERE salary < (
        SELECT AVG(salary)  average_salary
        FROM salary);
```

```sql
# 28.   Count how many employees have each occupation.
SELECT
    occupation,
    COUNT(*) count
FROM salary
GROUP BY occupation;

# 29.   Show all employees grouped by gender, along with the number of employees in each gender.
SELECT
    gender,
    COUNT(gender) gender_count
FROM employees
GROUP BY gender;

# 30.   Find the department(s) where the total salary is above $150,000.
SELECT
    department_name,
    SUM(salary) total_salary
FROM salary s
JOIN jcen_departments jd
    ON s.dept_id = jd.department_id
GROUP BY department_name
HAVING SUM(salary) > 150000;
```