Sub Queries

emp_id	emp_name	department	salary	city
1	John	HR	50000	London
2	Mary	IT	70000	New York
3	Alex	HR	45000	London
4	Steve	IT	65000	Paris
5	Emma	Finance	55000	London
6	Rachel	Finance	60000	Paris

```
INSERT INTO employees (emp_id, emp_name, department, salary, city) VALUES
(1, 'John',   'HR',     50000, 'London'),
(2, 'Mary',   'IT',     70000, 'New York'),
(3, 'Alex',   'HR',     45000, 'London'),
(4, 'Steve',  'IT',     65000, 'Paris'),
(5, 'Emma',   'Finance', 55000, 'London'),
(6, 'Rachel', 'Finance', 60000, 'Paris');
```

1. Find the employee who earns the **maximum salary**.

```
SELECT emp_name, salary
FROM employees
WHERE salary = (
   SELECT MAX(salary)
   FROM employees
);
```

	emp_name	salary
▶	Mary	70000

2. **Employees Who Earn More Than the Average Salary**

```
SELECT emp_name, salary
FROM employees
WHERE salary > (
   SELECT AVG(salary)
   FROM employees
);
```

	emp_name	salary
▶	Mary	70000
	Steve	65000
	Rachel	60000

3. Employee Working in the Same Department as “Alex”

```
SELECT emp_name, department
FROM employees
WHERE department = (
   SELECT department
   FROM employees
   WHERE emp_name = 'Alex'
);
```

	emp_name	department
▶	John	HR
	Alex	HR

4.Employees with Salary Equal to the Minimum Salary

```
SELECT emp_name, salary
FROM employees
WHERE salary = (
   SELECT MIN(salary)
   FROM employees
);
```

	emp_name	salary
▶	Alex	45000

5. **Department of the Highest Paid Employee**

```
SELECT department
FROM employees
WHERE salary = (
   SELECT MAX(salary)
   FROM employees
);
```

	department
▶	IT

6. **Find employee(s) working in the same city as ‘Emma’.**

```
SELECT emp_name, city
FROM employees
WHERE city = (
   SELECT city
   FROM employees
   WHERE emp_name = 'Emma'
);
```

	emp_name	city
▶	John	London
	Alex	London
	Emma	London

7. **Find employees earning less than ‘Mary’.**

```
SELECT emp_name, salary
FROM employees
WHERE salary < (
   SELECT salary
```

```
    FROM employees
    WHERE emp_name = 'Mary'
);
```

	emp_name	salary
▶	John	50000
	Alex	45000
	Steve	65000
	Emma	55000
	Rachel	60000

8. **Find department of the lowest-paid employee.**

```
SELECT department
FROM employees
WHERE salary = (
    SELECT MIN(salary)
    FROM employees
);
```

	department
▶	HR

9. **Find the employee who earns the same salary as ‘Steve’.**

```
SELECT emp_name
FROM employees
WHERE salary = (
    SELECT salary
    FROM employees
    WHERE emp_name = 'Steve'
);
```

	emp_name
▶	Steve

10. **Find employees who work in the same department as the employee with ID 2.**

```
SELECT emp_name, department
FROM employees
WHERE department = (
   SELECT department
   FROM employees
   WHERE emp_id = 2
);
```

	emp_name	department
▶	Mary	IT
	Steve	IT

11. **Find employees whose salary equals the average salary of all employees.**

```
SELECT emp_name, salary
FROM employees
WHERE salary = (
   SELECT AVG(salary)
   FROM employees
);
```

	emp_name	salary

12. **Find the highest-paid employee in the Finance department.**

```
SELECT emp_name, salary
FROM employees
WHERE salary = (
   SELECT MAX(salary)
   FROM employees
   WHERE department = 'Finance'
);
```

	emp_name	salary
▶	Rachel	60000

13. **Find department of the employee with the second-highest salary.**

```
SELECT department
FROM employees
WHERE salary = (
   SELECT MAX(salary)
   FROM employees
   WHERE salary < (
      SELECT MAX(salary)
      FROM employees
         )
);
```

	department
▶	IT