

Exercise 1: SQL Fundamentals Answers
 Database: employees-db
 Table: employees

1. SELECT Statement

```
SELECT *  
FROM employees;
```

2. SELECT DISTINCT Statement

```
SELECT DISTINCT department  
FROM employees;
```

Expected Output:

department
IT
HR
Finance
Marketing

3. ORDER BY Statement

```
SELECT first-name,  
       last-name  
       salary  
FROM employees  
ORDER BY salary DESC;
```

Expected Output:

first-name	last-name	salary
Emily	Davis	62000
Mike	Johnson	60000
Robert	Wilson	59000

4. LIMIT statement

```
SELECT first-name,  
       last-name,  
       salary
```

```
FROM employees  
ORDER BY salary DESC  
LIMIT 5;
```

Expected outcome:

first-name	last-name	salary
Emily	Davis	62000
Mike	Johnson	60000
Robert	Wilson	59000
John	Doe	55000
Sarah	Brown	53000

5. WHERE statement

```
SELECT first-name,  
       last-name,  
       department
```

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

Expected outcome:

first-name	last-name	department
John	Doe	IT
Sarah	Brown	IT

6. AND statement

```
SELECT first-name, last-name  
       last-name,  
       department,  
       salary
```

```
FROM employees
```


WHERE department = 'Finance'
AND salary > 58000;

Expected outcome:

first-name	last-name	department	salary
Mike	Johnson	Finance	60000

7. OR statement

SELECT first-name,
last-name,
department

FROM employees

WHERE department = 'HR' OR department = 'Marketing';

Expected outcome:

first-name	last-name	department
Jane	Smith	HR
Jessica	Moore	HR
David	White	Marketing

8. NOT statement

SELECT first-name,
last-name,
department

FROM employees

WHERE NOT department = 'IT';

Expected outcome:

first-name	last-name	department
Jane	Smith	HR
Mike	Johnson	Finance

9. IN statements

```
SELECT first-name,  
       last-name,  
       department
```

```
FROM employees  
WHERE department IN ('HR', 'IT', 'Finance');
```

Expected outcome:

first-name	last-name	department
John	Doe	IT
Jane	Smith	HR
Robert	Wilson	Finance
Mike	Johnson	Finance

10. Combining conditions

```
SELECT first-name,  
       last-name,  
       department,  
       salary,  
       city
```

```
FROM employees  
WHERE department = 'IT'  
AND salary > 50000  
AND city = 'New York'
```

Expected outcome:

first-name	last-name	department	salary	city
John	Doe	IT	55000	New York