

## Exercise 1

### Question 1

- 1 write a SQL query to retrieve all columns from the employees table.

Answer

```
SELECT *
```

```
FROM employees;
```

- 2 SELECT DISTINCT department  
FROM employees;

- 3 write a SQL query to retrieve all employees' first and last names, order by Salary in descending order.

Answer

```
SELECT first_name,  
       last_name
```

```
FROM employees
```

```
ORDER BY Salary Desc;
```

- 4 Write a SQL query to retrieve the top 5 highest-paid employees

Solution

```
SELECT *
```

```
FROM employees
```

```
ORDER BY salary Desc
```

```
LIMIT 5;
```

- 5 Write a SQL query to find employees who work in IT department

```
SELECT *
```

```
FROM employees
```

```
WHERE department = 'IT';
```



b) write a SQL query to find employees who work in Finance department AND have a salary greater than 58,000

Solution

```
SELECT *  
FROM employees  
WHERE department = 'FINANCE'  
AND salary > 58000;
```

7 Write a SQL query to find employees who works in the HR department or Marketing department

```
SELECT *  
FROM employees  
WHERE department = 'HR'  
OR department = 'Marketing';
```

8, Write a SQL query to employees who do not work in the IT department

```
SELECT *  
FROM employees
```

```
WHERE department != 'IT';
```

9 Write a SQL query to find employees in the HR, IT or Finance department

```
SELECT *
```

```
FROM employees
```

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



10 Write a SQL query to find employees who are in the IT department, have salary greater than 50 000 and are located in New York

```
SELECT *
```

```
FROM employees
```

```
WHERE department = 'IT'
```

```
AND Salary > 50 000
```

```
AND City = 'New York';
```

11, Write a SQL query to retrieve the first and last names of employees who work in the finance or Marketing department or in more than 52 000 and order the results by salary in descending order.

```
SELECT first_name,  
last_name
```

```
FROM employees
```

```
WHERE (department = 'finance' OR department = 'Marketing')
```

```
AND Salary > 52 000
```

```
ORDER BY salary DESC;
```

12, Write a SQL query to retrieve employees who are not in the finance department, have a salary greater than 50 000, and order the results by hire date in ascending order.

```
SELECT *
```

```
FROM employees
```

```
WHERE department <> 'finance'
```

```
AND Salary > 50000
```

```
ORDER BY hire-date ASC;
```



14 write a SQL query to find the first 3 employees who work in either Chicago or Los Angeles and belongs to the IT or Marketing department.

```
SELECT *  
FROM employees  
WHERE City IN ('Chicago', 'Los Angeles')  
AND department IN ('IT', 'Marketing')  
LIMIT 3;
```