Nolwazi Ndiweni – Exercise 1

Database: employees_db

id	firstname	last_name	department	salary	hire_date	city
1	John	Doe	IT	55000	2018-06-15	Newyork
2	Jane	Smith	HR	48000	2019-07-20	chicago
3	Mike	Johnson	Finance	60000	2017-09-30	Los Angels
4	Sarah	Brown	IT	53000	2021-03-25	New york
5	David	White	Marketing	52000	2016-04-10	San Francisco
6	Emily	Davis	IT	62000	2015-02-14	Chicago
7	Robert	Wilson	Finance	59000	2019-10-01	Houston
8	Jessica	Moore	HR	51000	2018-05-22	Los Angels
9	Daniel	Clark	Marketing	53000	2022-06-01	Chicago
10	Laura	Hall	IT	50000	2020-08-14	San Francisco

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

Solution

```
SELECT * FROM employees_db
```

Qn2: write a SQL query to find all the unique departments in the employees table

solution

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

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

```
SELECT firstname,
       last_name,
       salary
FROM employees
ORDER BY salary DESC;
```

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

```
SELECT firstname,
       last name,
       Salary
FROM employees
ORDER BY salary DESC
LIMIT 5;
```

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

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

6. Write a SQL query to find employees who work in the finance department AND have a salary greater than 58,000

```
SELECT *
FROM employees
WHERE department IN ('Finance') AND Salary > 58,000;
```

7. Write a SQL query to find employees who work in the HR department OR the marketing department

```
SELECT *
FROM employees
WHERE department IN ('HR', 'Marketing');
```

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

```
SELECT *
FROM employees
WHERE department NOT IN ('IT');
```

9. Write a SQL query to find employees who are 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 a salary greater than 50 000 and are located in New York.

```
SELECT *
FROM employees
WHERE department = 'IT'
    AND salary > 50 000
    AND location = 'New York';
```

11. Write a SQL query to retrieve the first and last name of employees who work in the Finance or Marketing, earn more than 52 000 and order the result by salary in descending order.

```
SELECT first_name,
       last_name
FROM employees
WHERE department IN ('IT', 'Marketing')
    AND Salary > 52,000
ORDER BY salary DESC;
```

12. Write a SQL query to ~~retrieve~~ find all the unique cities where employees work, excluding those in the IT and HR department.

```
SELECT DISTINCT city
FROM employee
WHERE department NOT IN ('IT', 'HR')
```