emp_id	name	department	salary	Joining_date	city
1	Alice Smith	HR	45000	2020-02-15	New York
2	Bob Johnson	IT	60000	2019-08-23	Chicago
3	Carol White	IT	75000	2021-01-10	New York
4	David Brown	Finance	50000	2020-06-01	San Diego
5	Eva Adams	HR	47000	2018-04-12	Chicago
6	Frank Lee	Finance	65000	2021-11-05	New York
7	Grace Kim	IT	80000	2017-09-18	San Diego
8	Henry Clark	Marketing	55000	2019-12-29	Chicago
9	Irene Scott	Marketing	53000	2021-03-22	New York
10	Jack Davis	IT	72000	2020-08-14	Chicago

Sample Queries to Practice

1. Show all employees who work in the IT department.
2. Find employees whose salary is greater than 60,000.
3. Get all employees who joined after 1st Jan 2020.
4. Find the total salary paid to employees in each department.
5. Show the highest paid employee in the Finance department.
6. List employees who are from Chicago and earn more than 55,000.
7. Find the number of employees in each city
8. Show employees in the IT department ordered by salary in descending order
9. Display the average salary of all employees.
10. Get the details of the top 3 highest paid employees

ANSWERS:

1) To show all the employees who work in IT department:

```
mysql> SELECT NAME FROM EMP WHERE DEPT='IT';
+--------------+
| NAME         |
+--------------+
| Bob          |
| carol white  |
| GRACE KIM    |
| JACK         |
+--------------+
4 rows in set (0.00 sec)
```

2) To find employees whose salary s greater than 60,000

```
mysql> select name from emp where salary>60000;
+--------------+
| name         |
+--------------+
| carol white  |
| FRANKLEE     |
| GRACE KIM    |
| JACK         |
+--------------+
4 rows in set (0.00 sec)
```

3) To get all employees who joined after 1st jan 2020:

```
mysql>  select name from emp  where joining_date > '2020-01-01';
--------------+
 name         |
--------------+
 Alice        |
 carol white  |
 David Brown  |
 FRANKLEE     |
 IRENE SCOTT  |
 JACK         |
--------------+
 rows in set (0.00 sec)
```

4) To find total salary paid to employees in each department:

```
mysql> select sum(salary) from emp group by dept;
+-------------+
| sum(salary) |
+-------------+
|       92000 |
|      287000 |
|      115000 |
|      108000 |
+-------------+
4 rows in set (0.00 sec)
```

5) To show the highest paid employee in finance department:

```
mysql> select name from emp where dept='finance' and salary>=all(select max(salary) from emp where dept='finance');
+----------+
| name     |
+----------+
| FRANKLEE |
+----------+
1 row in set (0.00 sec)
```

6) To list employess who are from chicago and earn more than 55000:

```
mysql>  Select name from emp where city='chicago' and salary >55000;
+-----------+
| name      |
+-----------+
| Bob       |
| GRACE KIM |
| JACK      |
+-----------+
3 rows in set (0.00 sec)
```

7) To find the number of employees in each city:

```
mysql> select count(name) as 'no.of.emp' from emp group by dept;
+-----------+
| no.of.emp |
+-----------+
|         2 |
|         4 |
|         2 |
|         2 |
+-----------+
4 rows in set (0.00 sec)
```

8) To show employees in the IT department ordered by salary in descending order:

```
mysql> SELECT NAME FROM EMP WHERE DEPT='IT' ORDER BY SALARY DESC;
+-------------+
| NAME        |
+-------------+
| GRACE KIM   |
| carol white |
| JACK        |
| Bob         |
+-------------+
4 rows in set (0.00 sec)
```

9) To display average salaries of all employees:

```
mysql> select avg(salary) as 'avg' from emp;
+------------+
| avg        |
+------------+
| 60200.0000 |
+------------+
1 row in set (0.00 sec)
```

10) To get the details of top 3 highest paid employees:

```
mysql> select * from emp order by salary desc limit 3;
+--------+-------------+------+--------+--------------+----------+
| emp_id | name        | dept | salary | joining_date | city     |
+--------+-------------+------+--------+--------------+----------+
|      9 | GRACE KIM   | IT   |  80000 | 2017-09-18   | CHICAGO  |
|      3 | carol white | IT   |  75000 | 2021-05-09   | New York |
|     10 | JACK        | IT   |  72000 | 2020-08-14   | CHICAGO  |
+--------+-------------+------+--------+--------------+----------+
3 rows in set (0.01 sec)
```