```
mysql> select * from Employee;
+--------+----------+------------+--------+-----------+------------+
| empno  | emp_name | dept       | salary | doj       | branch     |
+--------+----------+------------+--------+-----------+------------+
| E001   | Amit     | Production |  45000 | 12-mar-00 | Bangalore  |
| E002   | Amit     | HR         |  70000 | 3-jul-02  | Bangalore  |
| E003   | sunita   | Management | 120000 | 11-jan-01 | mysore     |
| E004   | sunita   | IT         |  67000 | 1-aug-01  | mysore     |
| E005   | mahesh   | Civil      | 145000 | 20-sep-03 | Mumbai     |
+--------+----------+------------+--------+-----------+------------+
5 rows in set (0.00 sec)

mysql>
mysql> select empno,salary from Employee;
+--------+--------+
| empno  | salary |
+--------+--------+
| E001   |  45000 |
| E002   |  70000 |
| E003   | 120000 |
| E004   |  67000 |
| E005   | 145000 |
+--------+--------+
5 rows in set (0.00 sec)

mysql>
mysql> select avg(salary) from Employee;
+-------------+
| avg(salary) |
+-------------+
|  89400.0000 |
+-------------+
1 row in set (0.01 sec)

mysql>
mysql> select count(*) from Employee;
+----------+
| count(*) |
+----------+
```

```
mysql>
mysql> select count(*) from Employee;
+----------+
| count(*) |
+----------+
|        5 |
+----------+
1 row in set (0.02 sec)

mysql>
mysql> select count(distinct emp_name) from Employee;
+--------------------------+
| count(distinct emp_name) |
+--------------------------+
|                        3 |
+--------------------------+
1 row in set (0.01 sec)

mysql>
mysql> select emp_name,sum(salary),count(*) from Employee group by(emp_name);
+----------+-------------+----------+
| emp_name | sum(salary) | count(*) |
+----------+-------------+----------+
| Amit     |      115000 |        2 |
| sunita   |      187000 |        2 |
| mahesh   |      145000 |        1 |
+----------+-------------+----------+
3 rows in set (0.01 sec)

mysql>
mysql> SELECT EMP_NAME, SUM(SALARY)
    -> FROM Employee GROUP BY(EMP_NAME)
    -> HAVING SUM(SALARY)>120000;
+----------+-------------+
| EMP_NAME | SUM(SALARY) |
+----------+-------------+
| sunita   |      187000 |
| mahesh   |      145000 |
+----------+-------------+
```

27°C
Partly cloudy

Search

ENG
IN

10:34 PM
11.3.25

```
mysql> select emp_name from Employee order by emp_name;
+----------+
| emp_name |
+----------+
| Amit     |
| Amit     |
| mahesh   |
| sunita   |
| sunita   |
+----------+
5 rows in set (0.01 sec)

mysql>
mysql> select * from Employee where emp_name='Amit' and salary>50000;
+--------+----------+-------+---------+-----------+------------+
| empno  | emp_name | dept  | salary  | doj       | branch     |
+--------+----------+-------+---------+-----------+------------+
| E002   | Amit     | HR    | 70000   | 3-jul-02  | Bangalore  |
+--------+----------+-------+---------+-----------+------------+
1 row in set (0.00 sec)

mysql>
mysql>
mysql> SELECT CURRENT_DATE;
+--------------+
| CURRENT_DATE |
+--------------+
| 2025-03-11   |
+--------------+
1 row in set (0.00 sec)

mysql> -- 6b (2)
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT EXTRACT(YEAR FROM SYSDATE);
ERROR 1054 (42S22): Unknown column 'SYSDATE' in 'field list'
mysql> SELECT YEAR(CURDATE());
+-----------------+
| YEAR(CURDATE()) |
```

```
+-------------------+
| YEAR(CURDATE()) |
+-------------------+
|              2025 |
+-------------------+
1 row in set (0.00 sec)

mysql>
mysql> -- 6b(3)
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT DAY(CURDATE());
+----------------+
| DAY(CURDATE()) |
+----------------+
|             11 |
+----------------+
1 row in set (0.00 sec)

mysql> SELECT EXTRACT(DAY FROM CURDATE());
+-----------------------------+
| EXTRACT(DAY FROM CURDATE()) |
+-----------------------------+
|                          11 |
+-----------------------------+
1 row in set (0.00 sec)

mysql>
mysql> -- 6b(4)
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT EXTRACT(MONTH FROM CURDATE());
+-------------------------------+
| EXTRACT(MONTH FROM CURDATE()) |
+-------------------------------+
|                             3 |
+-------------------------------+
1 row in set (0.00 sec)
```

```
mysql> SELECT MONTH(CURDATE());
+-----------------+
| MONTH(CURDATE()) |
+-----------------+
|               3 |
+-----------------+
1 row in set (0.00 sec)

mysql>
mysql> -- 6b(5)
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT CURDATE();
+------------+
| CURDATE()  |
+------------+
| 2025-03-11 |
+------------+
1 row in set (0.00 sec)

mysql> SELECT NOW();
+---------------------+
| NOW()               |
+---------------------+
| 2025-03-11 22:30:54 |
+---------------------+
1 row in set (0.00 sec)

mysql>
mysql>
mysql> -- string functions
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT ASCII('a');
+------------+
| ASCII('a') |
+------------+
|         97 |
```

```
1 row in set (0.00 sec)

mysql> SELECT ASCII('A');
+------------+
| ASCII('A') |
+------------+
|         65 |
+------------+
1 row in set (0.00 sec)

mysql> SELECT ASCII('Z');
+------------+
| ASCII('Z') |
+------------+
|         90 |
+------------+
1 row in set (0.00 sec)

mysql> SELECT ASCII('z');
+------------+
| ASCII('z') |
+------------+
|        122 |
+------------+
1 row in set (0.00 sec)

mysql>
mysql>
mysql> SELECT UPPER('bldeasb arts and kcp science college');
+----------------------------------------------+
| UPPER('bldeasb arts and kcp science college') |
+----------------------------------------------+
| BLDEASB ARTS AND KCP SCIENCE COLLEGE          |
+----------------------------------------------+
1 row in set (0.00 sec)

mysql>
mysql> SELECT LOWER('WELCOME TO DBMSLAB');
+------------------------------+
```

```
+-------------------------+
| LOWER('WELCOME TO DBMSLAB') |
+-------------------------+
| welcome to dbmslab      |
+-------------------------+
1 row in set (0.00 sec)

mysql>
mysql> SELECT REPLACE('HELLO', 'H', 'K');
+----------------------------+
| REPLACE('HELLO', 'H', 'K') |
+----------------------------+
| KELLO                      |
+----------------------------+
1 row in set (0.00 sec)

mysql>
mysql> SELECT REPLACE('COMPUTER', 'C', 'K');
+-------------------------------+
| REPLACE('COMPUTER', 'C', 'K') |
+-------------------------------+
| KOMPUTER                      |
+-------------------------------+
1 row in set (0.00 sec)

mysql>
mysql> SELECT REPLACE('HELLO', 'L', 'A');
+----------------------------+
| REPLACE('HELLO', 'L', 'A') |
+----------------------------+
| HEAAO                      |
+----------------------------+
1 row in set (0.00 sec)

mysql>
mysql> SELECT TRIM(BOTH 'A' FROM 'ANACONDA');
+--------------------------------+
| TRIM(BOTH 'A' FROM 'ANACONDA') |
+--------------------------------+
```

```
mysql>
mysql> SELECT SUBSTRING('ANACONDA' FROM 2);
+------------------------------+
| SUBSTRING('ANACONDA' FROM 2) |
+------------------------------+
| NACONDA                      |
+------------------------------+
1 row in set (0.00 sec)

mysql>
mysql> SELECT SUBSTRING('ANIL' FROM 2);
+--------------------------+
| SUBSTRING('ANIL' FROM 2) |
+--------------------------+
| NIL                      |
+--------------------------+
1 row in set (0.00 sec)

mysql>
mysql> SELECT LEFT('ANITA', LENGTH('ANITA') - 1);
+------------------------------------+
| LEFT('ANITA', LENGTH('ANITA') - 1) |
+------------------------------------+
| ANIT                               |
+------------------------------------+
1 row in set (0.00 sec)

mysql>
mysql> -- math functions
Query OK, 0 rows affected (0.00 sec)

mysql>
mysql> CREATE TABLE Student1 (
    ->      id INT PRIMARY KEY AUTO_INCREMENT,
    ->      admission_no VARCHAR(45) NOT NULL UNIQUE,
    ->      first_name VARCHAR(45) NOT NULL,
    ->      last_name VARCHAR(45) NOT NULL,
    ->      age INT,
```

```
mysql>
mysql> CREATE TABLE Fee (
    ->     admission_no VARCHAR(45) NOT NULL,
    ->     course VARCHAR(45) NOT NULL,
    ->     amount_paid INT
    ->
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql>
mysql> INSERT INTO Student1 (admission_no, first_name, last_name, age, city)
    -> VALUES (3354,'Luisa', 'Evans', 13, 'Texas'),
    -> (2135, 'Paul', 'Ward', 15, 'Alaska'),
    -> (4321, 'Peter', 'Bennett', 14, 'California'),
    -> (4213,'Carlos', 'Patterson', 17, 'New York'),
    -> (5112, 'Rose', 'Huges', 16, 'Florida'),
    -> (6113, 'Marielia', 'Simmons', 15, 'Arizona'),
    -> (7555,'Antonio', 'Butler', 14, 'New York'),
    -> (8345, 'Diego', 'Cox', 13, 'California');
Query OK, 8 rows affected (0.01 sec)
Records: 8  Duplicates: 0  Warnings: 0

mysql>
mysql> INSERT INTO Fee (admission_no, course, amount_paid) VALUES (3354,'Java', 20000),
    -> (7555, 'Android', 22000),
    -> (4321, 'Python', 18000),
    -> (8345,'SQL', 15000),
    -> (5112, 'Machine Learning', 30000);
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql>
mysql> -- join commands
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT Student1.admission_no, Student1.first_name, Student1.last_name, Fee.course, Fee.amount_paid
    -> FROM Student1 INNER JOIN Fee ON Student1.admission_no = Fee.admission_no;
+--------------+------------+-----------+--------------------+-------------+
| admission_no | first_name | last_name | course             | amount_paid |
```

```
mysql> SELECT Student1.admission_no, Student1.first_name, Student1.last_name, Fee.course, Fee.amount_paid
    -> FROM Student1 LEFT OUTER JOIN Fee ON Student1.admission_no = Fee.admission_no;
+---------------+------------+-----------+------------------+-------------+
| admission_no  | first_name | last_name | course           | amount_paid |
+---------------+------------+-----------+------------------+-------------+
| 3354          | Luisa      | Evans     | Java             |       20000 |
| 2135          | Paul       | Ward      | NULL             |        NULL |
| 4321          | Peter      | Bennett   | Python           |       18000 |
| 4213          | Carlos     | Patterson | NULL             |        NULL |
| 5112          | Rose       | Huges     | Machine Learning |       30000 |
| 6113          | Marielia   | Simmons   | NULL             |        NULL |
| 7555          | Antonio    | Butler    | Android          |       22000 |
| 8345          | Diego      | Cox       | SQL              |       15000 |
+---------------+------------+-----------+------------------+-------------+
8 rows in set (0.00 sec)

mysql>
mysql> SELECT Student1.admission_no, Student1.first_name, Student1.last_name, Fee.course, Fee.amount_paid
    -> FROM Student1 RIGHT OUTER JOIN Fee ON Student1.admission_no = Fee.admission_no;
+---------------+------------+-----------+------------------+-------------+
| admission_no  | first_name | last_name | course           | amount_paid |
+---------------+------------+-----------+------------------+-------------+
| 3354          | Luisa      | Evans     | Java             |       20000 |
| 7555          | Antonio    | Butler    | Android          |       22000 |
| 4321          | Peter      | Bennett   | Python           |       18000 |
| 8345          | Diego      | Cox       | SQL              |       15000 |
| 5112          | Rose       | Huges     | Machine Learning |       30000 |
+---------------+------------+-----------+------------------+-------------+
5 rows in set (0.00 sec)

mysql>
mysql> SELECT Student1.admission_no, Student1.first_name, Student1.last_name, Fee.course, Fee.amount_paid
    -> FROM Student1
    -> LEFT JOIN Fee ON Student1.admission_no = Fee.admission_no
    -> UNION
    -> SELECT Student1.admission_no, Student1.first_name, Student1.last_name, Fee.course, Fee.amount_paid
    -> FROM Student1
    -> RIGHT JOIN Fee ON Student1.admission_no = Fee.admission_no;
+---------------+------------+-----------+------------------+-------------+
```

```
+--------------+------------+-----------+------------------+-------------+
| admission_no | first_name | last_name | course           | amount_paid |
+--------------+------------+-----------+------------------+-------------+
| 3354         | Luisa      | Evans     | Java             |       20000 |
| 2135         | Paul       | Ward      | NULL             |        NULL |
| 4321         | Peter      | Bennett   | Python           |       18000 |
| 4213         | Carlos     | Patterson | NULL             |        NULL |
| 5112         | Rose       | Huges     | Machine Learning |       30000 |
| 6113         | Marielia   | Simmons   | NULL             |        NULL |
| 7555         | Antonio    | Butler    | Android          |       22000 |
| 8345         | Diego      | Cox       | SQL              |       15000 |
+--------------+------------+-----------+------------------+-------------+
8 rows in set (0.01 sec)

mysql>
mysql> -- Exercise
Query OK, 0 rows affected (0.00 sec)

mysql> CREATE TABLE EMPLOYEE1 (
    ->     Emp_no INT PRIMARY KEY,
    ->     E_name VARCHAR(50) NOT NULL,
    ->     E_address VARCHAR(100),
    ->     E_ph_no VARCHAR(15),
    ->     Dept_no INT,
    ->     Dept_name VARCHAR(50),
    ->     Job_id INT,
    ->     Designation VARCHAR(50),
    ->     Salary DECIMAL(10,2)
    -> );
Query OK, 0 rows affected (0.04 sec)

mysql>
mysql> INSERT INTO EMPLOYEE1 (Emp_no, E_name, E_address, E_ph_no, Dept_no, Dept_name, Job_id, Designation, Salary)
    -> VALUES
    -> (101, 'Alice Johnson', '123 Main St', '9876543210', 1, 'HR', 201, 'MANAGER', 75000.00),
    -> (102, 'Bob Smith', '456 Elm St', '8765432109', 2, 'IT', 202, 'ENGINEER', 60000.00),
    -> (103, 'Charlie Brown', '789 Oak St', '7654321098', 3, 'Finance', 203, 'MANAGER', 80000.00);
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

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```
    -> (103, 'Charlie Brown', '789 Oak St', '7654321098', 3, 'Finance', 203, 'MANAGER', 80000.00);
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql>
mysql> SELECT Emp_no, E_name, Salary
    -> FROM EMPLOYEE1
    -> WHERE Designation = 'MANAGER';
+--------+---------------+----------+
| Emp_no | E_name        | Salary   |
+--------+---------------+----------+
|    101 | Alice Johnson | 75000.00 |
|    103 | Charlie Brown | 80000.00 |
+--------+---------------+----------+
2 rows in set (0.00 sec)

mysql>
mysql> SELECT * FROM EMPLOYEE1 WHERE Salary > ANY (SELECT Salary FROM EMPLOYEE1 WHERE Dept_name = 'IT PROFF');
Empty set (0.00 sec)

mysql>
mysql> ALTER TABLE EMPLOYEE1 ADD Joining_Date DATE;
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM EMPLOYEE1 WHERE YEAR(Joining_Date) > 1981 ORDER BY Designation ASC;
Empty set (0.00 sec)

mysql>
mysql> SELECT Emp_no, E_name,
    ->         TIMESTAMPDIFF(YEAR, Joining_Date, CURDATE()) AS Experience,
    ->         Salary / 30 AS Daily_Salary
    -> FROM EMPLOYEE1;
+--------+---------------+------------+--------------+
| Emp_no | E_name        | Experience | Daily_Salary |
+--------+---------------+------------+--------------+
|    101 | Alice Johnson |       NULL |  2500.000000 |
|    102 | Bob Smith     |       NULL |  2000.000000 |
|    103 | Charlie Brown |       NULL |  2666.666667 |
+--------+---------------+------------+--------------+
3 rows in set (0.00 sec)

mysql>
```