```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| alightdb           |
| information_schema |
| mydatabase         |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
6 rows in set (0.02 sec)

mysql> use alightdb;
Database changed
mysql> CREATE TABLE emp (
    ->     EMPNO INT NOT NULL AUTO_INCREMENT,
    ->     ENAME VARCHAR(50),
    ->     JOB VARCHAR(50),
    ->     HIREDATE DATE,
    ->     SAL DECIMAL(10, 2),
    ->     COMM DECIMAL(10, 2),
    ->     DEPTNO INT,
    ->     MGR INT,
```

```
mysql> CREATE TABLE dept (
    ->     DEPTNO INT NOT NULL,
    ->     DNAME VARCHAR(50),
    ->     LOCATION VARCHAR(50),
    ->     PRIMARY KEY (DEPTNO)
    -> );
Query OK, 0 rows affected (0.03 sec)

mysql>
```

```
mysql> CREATE TABLE stud_master (
    ->     REG_NO INT NOT NULL,
    ->     S_NAME VARCHAR(50),
    ->     BRANCH VARCHAR(50),
    ->     PRIMARY KEY (REG_NO)
    -> );
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> CREATE TABLE stud_detail (
    ->     REG_NO INT NOT NULL,
    ->     COURSE_CODE VARCHAR(20),
    ->     COURSE_NAME VARCHAR(100),
    ->     MARKS INT,
    ->     SEM VARCHAR(10),
    ->     PRIMARY KEY (REG_NO, COURSE_CODE)
    -> );
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> INSERT INTO emp (empno, ename, job, mgr, hiredate, sal, comm, deptno)
    -> VALUES
    -> (7369, 'KHAN', 'CLERK', 7902, '1980-12-17', 800, NULL, 20),
    -> (7499, 'ALI', 'SALESMAN', 7698, '1981-02-20', 1600, 300, 30),
    -> (7521, 'VERMA', 'SALESMAN', 7698, '1981-02-22', 1250, 500, 30),
    -> (7566, 'PATEL', 'MANAGER', 7839, '1981-04-02', 2975, NULL, 20),
    -> (7698, 'SHARMA', 'MANAGER', 7839, '1981-05-01', 2850, NULL, 30),
    -> (7782, 'SINGH', 'MANAGER', 7839, '1981-06-09', 2450, NULL, 10);
Query OK, 6 rows affected (0.02 sec)
```

```
mysql> INSERT INTO dept (deptno, dname, location)
    -> VALUES
    -> (10, 'ACCOUNTING', 'MUMBAI'),
    -> (20, 'RESEARCH', 'BANGALORE'),
    -> (30, 'SALES', 'DELHI'),
    -> (40, 'OPERATIONS', 'CHENNAI');
Query OK, 4 rows affected (0.00 sec)
```

```
mysql> INSERT INTO stud_master (REG_NO, S_NAME, BRANCH)
    -> VALUES
    -> (1, 'Aamir Khan', 'Computer Engineering'),
    -> (2, 'Ayesha Begum', 'Electrical Engineering'),
    -> (3, 'Rahul Verma', 'Mechanical Engineering'),
    -> (4, 'Sara Ali', 'Computer Engineering');
Query OK, 4 rows affected (0.01 sec)
```

```
mysql> INSERT INTO stud_detail (REG_NO, COURSE_CODE, COURSE_NAME, MARKS, SEM
    -> VALUES
    -> (1, 'CS101', 'Data Structures', 85, 'Sem1'),
    -> (2, 'EE101', 'Circuit Analysis', 90, 'Sem1'),
    -> (3, 'ME101', 'Thermodynamics', 78, 'Sem1'),
    -> (4, 'CS102', 'Algorithms', 88, 'Sem1');
Query OK, 4 rows affected (0.01 sec)
Records: 4  Duplicates: 0  Warnings: 0
```

```
mysql> SELECT * FROM emp;
+-------+--------+----------+------------+---------+--------+--------+
| EMPNO | ENAME  | JOB      | HIREDATE   | SAL     | COMM   | DEPTNO |
+-------+--------+----------+------------+---------+--------+--------+
|  7369 | KHAN   | CLERK    | 1980-12-17 |  800.00 |   NULL |     20 |
|  7499 | ALI    | SALESMAN | 1981-02-20 | 1600.00 | 300.00 |     30 |
|  7521 | VERMA  | SALESMAN | 1981-02-22 | 1250.00 | 500.00 |     30 |
|  7566 | PATEL  | MANAGER  | 1981-04-02 | 2975.00 |   NULL |     20 |
|  7698 | SHARMA | MANAGER  | 1981-05-01 | 2850.00 |   NULL |     30 |
|  7782 | SINGH  | MANAGER  | 1981-06-09 | 2450.00 |   NULL |     10 |
+-------+--------+----------+------------+---------+--------+--------+
6 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM emp
    -> WHERE sal BETWEEN 1000 AND 2000;
+-------+-------+----------+------------+---------+--------+--------
| EMPNO | ENAME | JOB      | HIREDATE   | SAL     | COMM   | DEPTNO
+-------+-------+----------+------------+---------+--------+--------
|  7499 | ALI   | SALESMAN | 1981-02-20 | 1600.00 | 300.00 |     30
|  7521 | VERMA | SALESMAN | 1981-02-22 | 1250.00 | 500.00 |     30
+-------+-------+----------+------------+---------+--------+--------
2 rows in set (0.00 sec)
```

```
mysql> SELECT ename, job FROM emp
    -> WHERE job = 'CLERK' AND deptno = 20;
+-------+-------+
| ename | job   |
+-------+-------+
| KHAN  | CLERK |
+-------+-------+
1 row in set (0.00 sec)
```

```
mysql> SELECT DISTINCT job FROM emp;
+----------+
| job      |
+----------+
| CLERK    |
| SALESMAN |
| MANAGER  |
+----------+
3 rows in set (0.00 sec)
```

```
mysql> SELECT deptno, dname FROM dept
    -> ORDER BY dname;
+--------+------------+
| deptno | dname      |
+--------+------------+
|     10 | ACCOUNTING |
|     40 | OPERATIONS |
|     20 | RESEARCH   |
|     30 | SALES      |
+--------+------------+
4 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM stud_master;
+---------+---------------+-------------------------+
| REG_NO  | S_NAME        | BRANCH                  |
+---------+---------------+-------------------------+
|       1 | Aamir Khan    | Computer Engineering    |
|       2 | Ayesha Begum  | Electrical Engineering  |
|       3 | Rahul Verma   | Mechanical Engineering  |
|       4 | Sara Ali      | Computer Engineering    |
+---------+---------------+-------------------------+
4 rows in set (0.00 sec)

mysql> SELECT stud_detail.REG_NO, stud_master.S_NAME
    -> FROM stud_detail
    -> JOIN stud_master ON stud_detail.REG_NO = stud_master.REG_NO
    -> WHERE stud_master.BRANCH = 'Computer Engineering';
+---------+------------+
| REG_NO  | S_NAME     |
+---------+------------+
|       1 | Aamir Khan |
|       4 | Sara Ali   |
+---------+------------+
2 rows in set (0.00 sec)
```

EXP -2

EMPNO	ENAME	JOB	HIREDATE	SAL	COMM	DEPTNO	MGR	SPOUSE
101	MOHAMMED	MANAGER	2020-05-05	10000		10		
102	NOUMAN	TRAINEE	2020-05-05	10000		10		
103	RAZI	TRAINEE	2020-05-05	10000		10		
104	AHMED	MANAGER	2020-05-05	10000		10		

EMPNO	ENAME	JOB	HIREDATE	SAL	COMM	DEPTNO	MGR	SPOUSE
101	MOHAMMED	MANAGER	2020-05-05	10000		10		
102	NOUMAN	PROGRAMMER	2020-05-05	10000		10		
103	RAZI	PROGRAMMER	2020-05-05	10000		10		
104	AHMED	MANAGER	2020-05-05	10000		10		

deptno	deptname	location
20	HR	Surat

EMPNO	ENAME	JOB	HIREDATE	SAL	COMM	DEPTNO	MGR	SPOUSE
101	MOHAMMED	MANAGER	2020-05-05	10000		10		
104	AHMED	MANAGER	2020-05-05	10000		10		

EMPNO	ENAME	JOB	HIREDATE	SAL	COMM	DEPTNO	MGR	SPOUSE
101	MOHAMMED	MANAGER	2020-05-05	10000		10		
104	AHMED	MANAGER	2020-05-05	10000		10		
102	NOUMAN	PROGRAMMER	2020-05-05	10000		20		

EMPNO	ENAME	DEPTNO	DEPTNAME
101	MOHAMMED	10	THERAPIST
103	RAZI	10	THERAPIST
104	AHMED	10	THERAPIST

Exp-3

```
+-------------+-------------+-----------------+
| employee_id | employee_name| department_name |
+-------------+-------------+-----------------+
|           3 | Charlie     | HR              |
|           4 | David       | HR              |
|           1 | Alice       | Sales           |
|           2 | Bob         | Sales           |
|           5 | Eve         | IT              |
|           6 | Frank       | IT              |
+-------------+-------------+-----------------+
```

```
+-------------+---------------+---------------+--------+--------------+------------+--------+
| employee_id | employee_name | department_id | salary | job_title    | manager_id | city   |
+-------------+---------------+---------------+--------+--------------+------------+--------+
|           1 | Alice         |             1 | 12000  | Manager      | NULL       | Baroda |
|           3 | Charlie       |             2 | 11000  | HR Executive | 4          | Baroda |
|           5 | Eve           |             3 | 13000  | IT Manager   | NULL       | Baroda |
|           6 | Frank         |             3 | 9500   | Developer    | 5          | Baroda |
+-------------+---------------+---------------+--------+--------------+------------+--------+
```

employee_name	salary	department_id
Alice	12000	1
Charlie	11000	2
Eve	13000	3

employee_name	job_title	salary	department_name
Eve	IT Manager	13000	IT
Alice	Manager	12000	Sales
Charlie	HR Executive	11000	HR
Frank	Developer	9500	IT
Bob	Salesman	9000	Sales

employee_id	employee_name	manager_id	manager_name
1	Alice	NULL	NULL
2	Bob	1	Alice
3	Charlie	4	David
4	David	5	Eve
5	Eve	NULL	NULL
6	Frank	5	Eve

employee_name	salary	manager_name	manager_salary
Bob	9000	Alice	12000
David	8000	Eve	13000
Frank	9500	Eve	13000

EXP -4

```
mysql> SELECT * FROM client_master;
+----------+------------------+-------------+-------------+---------+-------+---------+
| clientno | name             | address     | city        | pincode | state | bal_due |
+----------+------------------+-------------+-------------+---------+-------+---------+
|        1 | John Doe         | 123 Main St | New York    | 10001   | NY    | 1000.00 |
|        2 | Jane Smith       | 456 Elm St  | Los Angeles | 90001   | CA    |  500.50 |
|        3 | Michael Johnson  | 789 Oak St  | Chicago     | 60601   | IL    |  750.25 |
+----------+------------------+-------------+-------------+---------+-------+---------+
```

SELECT * FROM product_master;

```
mysql> SELECT * FROM product_master;
+-----------+-------------+-------------+------------+------------+
| Productno | Description | Qty_on_hand | Sell_price | Cost_price |
+-----------+-------------+-------------+------------+------------+
| P001      | Laptop      |          10 |    1200.00 |     900.00 |
| P002      | Smartphone  |          20 |     800.00 |     600.00 |
| P003      | Tablet      |          15 |     500.00 |     350.00 |
+-----------+-------------+-------------+------------+------------+
```

SELECT * FROM salesman_master;

```
mysql> SELECT * FROM salesman_master;
+-----+-------------+--------------+---------------+---------+-------+----------+-----------+
| Sno | S_name      | Address      | city          | Pincode | State | Sal_amt  | Tgt_to_get|
+-----+-------------+--------------+---------------+---------+-------+----------+-----------+
| 101 | David Brown | 321 Pine St  | Houston       | 77001   | TX    | 5000.00  | 10000.00  |
| 102 | Emily White | 654 Cedar St | San Francisco | 94101   | CA    | 4500.00  |  9000.00  |
| 103 | Daniel Lee  | 987 Maple St | Boston        | 02101   | MA    | 4000.00  |  8000.00  |
+-----+-------------+--------------+---------------+---------+-------+----------+-----------+
3 rows in set (0.00 sec)
```

SELECT * FROM sales_order;

```
mysql> SELECT * FROM sales_order;
+---------+----------+------------+-------------+-----+------------+
| Orderno | clientno | orderdate  | delyaddr    | sno | delydate   |
+---------+----------+------------+-------------+-----+------------+
|    1001 |        1 | 2024-07-01 | 123 Main St | 101 | 2024-07-10 |
|    1002 |        2 | 2024-07-02 | 456 Elm St  | 102 | 2024-07-11 |
|    1003 |        3 | 2024-07-03 | 789 Oak St  | 103 | 2024-07-12 |
+---------+----------+------------+-------------+-----+------------+
3 rows in set (0.00 sec)
```

SELECT * FROM sales_order_details;

```
mysql> SELECT * FROM sales_order_details;
+---------+-----------+------------+
| Orderno | Productno | qtyordered |
+---------+-----------+------------+
|    1001 | P001      |          2 |
|    1001 | P002      |          5 |
|    1002 | P003      |          3 |
|    1003 | P001      |          1 |
|    1003 | P002      |          4 |
+---------+-----------+------------+
5 rows in set (0.00 sec)

mysql>
```

EXP - 5

empno	ename	salary	dname
2	Sana Shahrukh	6000	IT
9	Rushik	6100	SALES
7	Jamed Bond	6200	HR

empno	ename	hire_date	dname
4	Tahseen	2023-03-10	HR
8	Obama Brack	2023-03-15	IT
9	Rushik	2023-05-10	SALES

empno	ename	salary	job_title
7	Jamed Bond	6200	Manager
2	Sana Shahrukh	6000	Developer
6	Sarah	5700	Salesperson

ename	salary	dname	job_title
Imran	5000	HR	Manager
Tahseen	5200	HR	Developer
Obama Brack	5300	IT	Developer
Misbah Khan	5500	SALES	Salesperson
Sarah	5700	SALES	Salesperson

empno	ename	job_title	deptno
7	Jamed Bond	Manager	10

ClerkView1 from DB1.

```
mysql> USE db1;
Database changed
mysql>
mysql> SELECT * FROM ClerkView1;
+-----------+---------------+-------+----------+
| empnumber | ename         | job   | sal      |
+-----------+---------------+-------+----------+
|       102 | Fatima Begum  | Clerk | 25000.00 |
|       103 | Aamir Khan    | Clerk | 23000.00 |
|       105 | Rahul Sharma  | Clerk | 22000.00 |
+-----------+---------------+-------+----------+
3 rows in set (0.00 sec)
```

ClerkView1 from DB2.

```
mysql> USE db2;
Database changed
mysql>
mysql> SELECT * FROM ClerkView2;
+-----------+---------------+-------+----------+
| empnumber | ename         | job   | sal      |
+-----------+---------------+-------+----------+
|       107 | Imran Sheikh  | Clerk | 24000.00 |
+-----------+---------------+-------+----------+
1 row in set (0.00 sec)
```

Combined ClerkView from

```
mysql> -- Combine results from both views
mysql> SELECT * FROM db1.ClerkView1
    -> UNION ALL
    -> SELECT * FROM db2.ClerkView2;
+-----------+---------------+-------+----------+
| empnumber | ename         | job   | sal      |
+-----------+---------------+-------+----------+
|       102 | Fatima Begum  | Clerk | 25000.00 |
|       103 | Aamir Khan    | Clerk | 23000.00 |
|       105 | Rahul Sharma  | Clerk | 22000.00 |
|       107 | Imran Sheikh  | Clerk | 24000.00 |
+-----------+---------------+-------+----------+
4 rows in set (0.00 sec)
```