```
atabase changed
ysql> SELECT * FROM Employees;
                      Name

Jal Shah

Mayank Desai

Hitanshi Varma
Dhairya Dalvadeya
Dhairya Hadvani
Pavan Shah
Bhakt Talati
Chitral Shah
Daksh Chandnani
Kartikeya Dabral
Shahrukh Khan
Ranbir Kapoor
Aayush Jasani
Ansh Prajapati
Jay Variya
Harshit Sharma
Virat Kholi
Heet Kotak
Henil Goti
Mayank Patel
  EmployeeID | Name
                                                                  Department | Salary | JoiningDate |
                                                                                                                2012-10-30
2012-10-31
2013-10-30
2014-01-15
2014-09-14
2013-04-31
2015-06-30
2019-04-04
2018-10-24
2020-05-01
2024-10-02
2024-11-29
2025-01-01
2025-01-15
2025-04-25
2020-03-14
2023-03-19
2019-10-11
                                                                 IT
IT
IT
R&D
R&D
Marketing
Finance
Support
                                                                                           10000000
1000000
10000000
                                                                                             1500000
15000
450000
400000
4000000
                                                                 Support
HR
Logistics
Sales
Sales
Admin
Marketing
Operations
HR
Marketing
Finance
R&D
Finance
                  10
11
12
13
14
15
16
17
18
19
20
                                                                                              400000
300000
3000000
                                                                                             300000
5000000
1000000
                                                                                                 10000
20 rows in set (0.00 sec)
 ysql> SELECT * FROM Employees WHERE Name LIKE 'A%';
  EmployeeID | Name
                                                           Department | Salary |
                                                                                                       JoiningDate |
                                                                                     400000 | 2024-10-02
300000 | 2024-11-29
                  13 | Aayush Jasani
14 | Ansh Prajapati
                                                         | Admin
| Marketing
  rows in set (0.00 sec)
 ysql> SELECT * FROM Employees WHERE Name LIKE '%e'; mpty set (0.00 sec)
 ysql> SELECT * FROM Employees WHERE Name LIKE '%ar%';
  EmployeeID | Name
                                                             | Department | Salary
                                                                                                            |
| JoiningDate |
                  3 | Hitanshi Varma
10 | Kartikeya Dabral
15 | Jay Variya
16 | Harshit Sharma
                                                                                          10000000 |
400000 |
3000000 |
30000 |
                                                                                                               2013-10-30
2018-10-24
2025-01-01
2025-01-15
                                                                IT
Logistics
Operations
HR
  rows in set (0.00 sec)
 ysql> SELECT * FROM Employees WHERE Department LIKE 'F%';
  EmployeeID | Name
                                                     | Department | Salary |
                  7 | Bhakt Talati | Finance
18 | Heet Kotak | Finance
20 | Mayank Patel | Finance
                                                                                  1500000
5000000
10000
                                                                                                     2015-06-30
2020-03-14
2019-10-11
  rows in set (0.00 sec)
mysql> SELECT * FROM Employees WHERE Name LIKE '____';
Empty set (0.00 sec)
 ysql> SELECT * FROM Employees WHERE Department IN('HR','Finance');
  EmployeeID | Name
                                                           | Department | Salary | JoiningDate
                                                                                                           2015-06-30
2018-09-24
2025-01-15
2020-03-14
2019-10-11
                  7 | Bhakt Talati
9 | Daksh Chandnani
16 | Harshit Sharma
18 | Heet Kotak
20 | Mayank Patel
                                                                                        1500000
450000
30000
                                                               Finance
                                                               HR
HR
                                                                                        5000000
10000
  rows in set (0.00 sec)
 ysql> SELECT * FROM Employees WHERE Salary IN(10000000,1000000,5000000);
                                                         | Department | Salary | JoiningDate |
  EmployeeID | Name
                                                           IT
IT
IT
IT
Finance
R&D
                                                                                                           2012-10-30
2012-10-31
2013-10-30
2020-03-14
2023-03-19
                  1 | Jal Shah
2 | Mayank Desai
3 | Hitanshi Varma
18 | Heet Kotak
19 | Henil Goti
                                                                                     10000000
1000000
10000000
  rows in set (0.00 sec)
  ysql> SELECT * FROM Employees WHERE EmployeeID IN(1,4,7);
                                                               | Department | Salary
  EmployeeID | Name
                                                                                                              | JoiningDate |
                       | Jal Shah
| Dhairya Dalvadeya
| Bhakt Talati
                                                                                            10000000 |
10000 |
1500000 |
                                                                                                                 2012-10-30
2014-01-15
2015-06-30
                                                                  IT
R&D
Finance
```

3 rows in set (0.00 sec)

```
ysql> SELECT * FROM Employees WHERE Department NOT IN('IT','Finance')
  EmployeeID | Name
                                                                 Department |
                                                                                          Salary | JoiningDate
                          Dhairya Dalvadeya
Dhairya Hadvani
Pavan Shah
Chitral Shah
Daksh Chandnani
Kartikeya Dabral
Shahrukh Khan
Ranbir Kapoor
Aayush Jasani
Ansh Prajapati
Jay Variya
Harshit Sharma
Virat Kholi
Henil Goti
                                                                                                             2014-01-15
2014-09-14
2013-04-13
2019-04-04
2018-09-24
2018-10-24
2020-05-01
2024-10-02
2024-11-29
2025-01-01
2025-04-25
2023-03-19
                                                                                           10000
30000
300000
                                                                  R&D
Marketing
Support
HR
                                                                                            15000
450000
400000
                                                                 HR
Logistics
Sales
Sales
Admin
Marketing
Operations
HR
Marketing
R&D
                                                                                           3000000
.
14 rows in set (0.00 sec)
 ysql> SELECT * FROM Employees WHERE YEAR(JoiningDate) IN (2019,2021,2022);
  EmployeeID | Name
                                                    | Department | Salary | JoiningDate
                 8 | Chitral Shah | Support
20 | Mayank Patel | Finance
                                                                                   15000 |
10000 |
  rows in set (0.00 sec)
 ysql> SELECT * FROM Employees WHERE Salary BETWEEN 5000000 AND 6500000;
                                             | Department | Salary | JoiningDate |
  EmployeeID | Name
               18 | Heet Kotak | Finance | 5000000 | 2020-03-14 |
  row in set (0.00 sec)
 ysql> SELECT * FROM Employees WHERE JoiningDate BETWEEN '2020-01-01' AND '2021-12-31';
                                                         Department | Salary | JoiningDate
  EmployeeID | Name
                 11 | Shahrukh Khan
12 | Ranbir Kapoor
18 | Heet Kotak
                                                                               | 4000000 | 2020-05-01
| 4000000 | 2020-05-01
| 5000000 | 2020-03-14
                          Shahrukh Khan | Sales
Ranbir Kapoor | Sales
Heet Kotak | Finance
  rows in set (0.00 sec)
 ysql> SELECT * FROM Employees WHERE EmployeeID BETWEEN 3 AND 6;
  EmployeeID | Name
                                                              | Department | Salary | JoiningDate |
                   10000000 | 2013-10-30
10000 | 2014-01-15
30000 | 2014-09-14
3000000 | 2013-04-13
                                                              IT
| R&D
| R&D
| Marketing
 ysql> SELECT * FROM Employees WHERE Salary NOT BETWEEN 5000000 AND 6500000;
                                                              | Department | Salary | JoiningDate
  EmployeeID | Name
                         Name
Jal Shah
Mayank Desai
Hitanshi Varma
Dhairya Dalvadeya
Dhairya Hadvani
Pavan Shah
Bhakt Talati
Chitral Shah
Daksh Chandnani
Kartikeya Dabral
Shahrukh Khan
Rambir Kapoor
Aayush Jasani
Ansh Prajapati
Jay Variya
Harshit Sharma
Virat Kholi
Henil Goti
Mayank Patel
                                                                IT
IT
IT
R&D
R&D
Marketing
Finance
Support
HR
Logistics
Sales
Sales
Admin
Marketing
Operations
HR
Marketing
R&D
R&D
Finance
                                                                                                               2012-10-30
2012-10-31
2013-10-30
2014-01-15
2014-09-14
2013-04-13
2015-06-30
2019-04-04
2018-09-24
2018-10-24
2020-05-01
2024-10-02
2024-11-29
2025-01-01
2025-01-01
2023-03-19
2019-10-11
                                                                                          10000000
1000000
10000000
                                                                                           1500000
15000
450000
400000
                                                                                            4000000
4000000
                                                                                             3000000
                                                                                                10000
9 rows in set (0.00 sec)
ysql> SELECT * FROM Employees WHERE JoiningDate BETWEEN '2019-03-01' AND '2022-03-01';
  EmployeeID | Name
                                                          Department | Salary | JoiningDate
                                                                                                     2019-04-04
2020-05-01
2020-05-01
2020-03-14
2019-10-11
                 8 | Chitral Shah
11 | Shahrukh Khan
12 | Ranbir Kapoor
18 | Heet Kotak
20 | Mayank Patel
                                                                                  15000
4000000
4000000
5000000
10000
                                                         Support
Sales
Sales
Finance
Finance
```

rows in set (0.00 sec)

```
mysql> Use Jal;
Database changed
mysql> create Table Student(RollNo INT PRIMARY KEY,
-> Name VARCHAR(100);
Query OK, 0 rows affected (0.04 sec)
mysql> SELECT * FROM Student;
Empty set (0.02 sec)
mysql> ALTER TABLE Student ADD Email VARCHAR(100);
query OK, 0 rows affected (0.05 sec)
mysql> ALTER TABLE Student ADD Email VARCHAR(100);
query OK, 0 rows affected (0.05 sec)
mysql> ALTER TABLE Student MODIFY Age SMALLINT;
query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> ALTER TABLE Student MODIFY Age SMALLINT;
query OK, 0 rows affected (0.06 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> SELECT * FROM Student;
Empty set (0.00 sec)
mysql> Create Table Course(CourseID INT PRIMARY KEY,
-> CourseAmer WARCHAR(100) UNIOUE,
-> Credits INT CHECK(Credits-DO);
query OK, 0 rows affected (0.05 sec)
mysql> SELECT * FROM Course;
Empty set (0.00 sec)
mysql> SELECT * FROM Course;
Empty set (0.00 sec)
mysql> ALTER TABLE Student DROP COLUMN Email;
query OK, 0 rows affected (0.05 sec)
mysql> ADD publicates: 0 Warnings: 0
mysql> Romer TABLE Course;
query OK, 0 rows affected (0.02 sec)
mysql> SELECT * FROM Course;
ERROR 1146 (4/2502): Table 'jal.course' doesn't exist
mysql> Romer TABLE Course;
guery OK, 0 rows affected (0.03 sec)
mysql> Romer TABLE Course;
guery OK, 0 rows affected (0.03 sec)
mysql> Romer TABLE Course;
guery OK, 0 rows affected (0.03 sec)
mysql> Romer TABLE Course;
guery OK, 0 rows affected (0.03 sec)
mysql> Romer TABLE Course;
guery OK, 0 rows affected (0.03 sec)
mysql> Romer TABLE Course;
guery OK, 0 rows affected (0.03 sec)
mysql> Romer TABLE Course;
guery OK, 0 rows affected (0.03 sec)
mysql> Romer TABLE Course;
guery OK, 0 rows affected (0.03 sec)
mysql> SELECT * FROM Student;
guery OK, 0 rows affected (0.03 sec)
mysql> Romer TABLE TABLE Student;
guery OK, 0 rows affected (0.03 sec)
mysql> SELECT * FROM Student;
```

```
ysql> INSERT<sup>*</sup>INTO Student VALUES(101,"Jal",18,"CSD");
wery OK, 1 row affected (0.01 sec)
mysql> INSERT INTO Student VALUES(102,"Aditya",20,"CSE");
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO Student VALUES(103,"Manan",19,"IT");
Query OK, 1 row affected (0.01 sec)
 ysql> SELECT * FROM Student;
  RollNo | Name | Age | Department |
      101 | Jal
102 | Aditya
103 | Manan
                            18
20
19
  rows in set (0.00 sec)
mysql> UPDATE Student SET Department="CSE"
-> WHERE RollNo=101;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1 Changed: 1 Warnings: 0
 ysql> SELECT * FROM Student;
  RollNo | Name | Age | Department |
           | Jal
| Aditya
| Manan
  rows in set (0.00 sec)
mysql> DELETE FROM Student WHERE Age < 18;
Query OK, O rows affected (0.00 sec)
 ysql> SELECT * FROM Student;
  RollNo | Name | Age | Department |
          | Jal
| Aditya
| Manan
  rows in set (0.00 sec)
 ysql> SELECT * FROM Student WHERE Department = "IT";
  RollNo | Name | Age | Department |
      103 | Manan | 19 | IT
  row in set (0.00 sec)
 ysql> SELECT Name,Department FROM Student;
  Name | Department
  Jal | CSE
Aditya | CSE
Manan | IT
  rows in set (0.00 sec)
 ysql> SELECT * FROM Student ORDER BY Age DESC;
  RollNo | Name | Age | Department |
      102 | Aditya
103 | Manan
101 | Jal
  rows in set (0.00 sec)
 ysql> SELECT * FROM Student WHERE Name LIKE 'A%';
  RollNo | Name | Age | Department |
      102 | Aditya |
                          20 | CSE
  row in set (0.00 sec)
 ysql> SELECT * FROM Student WHERE Age BETWEEN 18 AND 25;
  RollNo | Name | Age | Department |
      101 | Jal
102 | Aditya
103 | Manan
  rows in set (0.00 sec)
mysql> CREATE TABLE Library(BookID INT,Title VARCHAR(100),Author VARCHAR(100),Price INT); Query OK, 0 rows affected (0.03 sec)
```

```
mysql> INSERT INTO Library VALUES(1001,"Mahabharat","Ved Vyasa",100);
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO Library VALUES(1002,"Ramayan","Valmiki",150);
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO Library VALUES(1003,"A Suitable Boy","Vikram Seth",900);
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO Library VALUES(1004,"The Guide","R. K. Narayan",500);
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO Library VALUES(1005,"Tales of Mayank","Mayank Desai",10);
Query OK, 1 row affected (0.01 sec)
 ysql> SELECT * FROM Library;
   BookID | Title
                                                                              | Price |
                                                 Author
      1001 | Mahabharat
1002 | Ramayan
1003 | A Suitable Boy
1004 | The Guide
1005 | Tales of Mayank
                                                                                     100
150
900
                                                Ved Vyasa
| Valmiki
| Vikram Seth
| R. K. Narayan
| Mayank Desai
   rows in set (0.00 sec)
mysql> UPDATE Library SET Price = Price * 1.10 WHERE Price < 300;
Query OK, 3 rows affected (0.01 sec)
Rows matched: 3 Changed: 3 Warnings: 0
 nysql> SELECT * FROM Library;
   BookID | Title
                                                                              | Price |
       1001
1002
1003
1004
                                                  Ved Vyasa
Valmiki
Vikram Seth
R. K. Narayan
Mayank Desai
                   Mahabharat
                                                                                     110
165
900
500
      1001 | Mahabharac
1002 | Ramayan
1003 | A Suitable Boy
1004 | The Guide
1005 | Tales of Mayank
mysql> DELETE FROM Library WHERE Author = "Mayank Desai";
Query OK, 1 row affected (0.01 sec)
 ysql> SELECT * FROM Library;
   BookID | Title
                                               Author
                                                                               Price |
               ------
| Mahabharat
| Ramayan
| A Suitable Boy
| The Guide
                                                 Ved Vyasa
Valmiki
Vikram Seth
R. K. Narayan
                                                                                   110
165
900
500
      1001
1002
1003
1004
```