```
mysql> SELECT*FROM STUDENT;
+-------+--------+--------+------------+----------+---------+
| REGNO | NAME   | GENDER | DOB        | MOBILENO | CITY    |
+-------+--------+--------+------------+----------+---------+
|   101 | DEVAA  | F      | 2004-11-12 |    12345 | CHENNAI |
|   102 | ROGER  | M      | 2004-01-22 |    98765 | TRICHY  |
|   103 | YOSEF  | M      | 2005-05-07 |   981235 | VELLORE |
|   104 | HARINI | F      | 2004-11-27 |   987895 | MADURAI |
+-------+--------+--------+------------+----------+---------+
4 rows in set (0.01 sec)

mysql> DESC STUDENT;
+----------+-------------+------+-----+---------+-------+
| Field    | Type        | Null | Key | Default | Extra |
+----------+-------------+------+-----+---------+-------+
| REGNO    | int(11)     | YES  |     | NULL    |       |
| NAME     | varchar(15) | YES  |     | NULL    |       |
| GENDER   | char(1)     | YES  |     | NULL    |       |
| DOB      | date        | YES  |     | NULL    |       |
| MOBILENO | int(11)     | YES  |     | NULL    |       |
| CITY     | varchar(15) | YES  |     | NULL    |       |
+----------+-------------+------+-----+---------+-------+
6 rows in set (0.04 sec)

mysql> UPDATE STUDENT SET NAME = 'UPDATED STUDENT' WHERE REGNO = 103;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT*FROM STUDENT;
+-------+-----------------+--------+------------+----------+---------+
| REGNO | NAME            | GENDER | DOB        | MOBILENO | CITY    |
+-------+-----------------+--------+------------+----------+---------+
|   101 | DEVAA           | F      | 2004-11-12 |    12345 | CHENNAI |
|   102 | ROGER           | M      | 2004-01-22 |    98765 | TRICHY  |
|   103 | UPDATED STUDENT | M      | 2005-05-07 |   981235 | VELLORE |
|   104 | HARINI          | F      | 2004-11-27 |   987895 | MADURAI |
+-------+-----------------+--------+------------+----------+---------+
4 rows in set (0.00 sec)
```

```
mysql> SELECT*FROM FACULTY;
+-------+---------------+--------+------------+------------+----------+
| FACNO | FACNAME       | GENDER | DOB        | DOJ        | MOBILENO |
+-------+---------------+--------+------------+------------+----------+
| 1111  | SUJI          | F      | 1989-01-20 | 2020-08-16 |    11111 |
| 2222  | SANKAR GANESH | M      | 1978-05-30 | 2021-09-08 |    55555 |
| 1     | SANKAR        | M      | 1991-03-12 | 2000-11-14 |    12345 |
| 3     | SUJI          | F      | 1981-02-01 | 2002-09-24 |    98765 |
| 7     | ANBU          | M      | 1978-12-21 | 1997-08-04 |   985615 |
+-------+---------------+--------+------------+------------+----------+
5 rows in set (0.00 sec)

mysql> ALTER TABLE FACULTY ADD RESIGNED VARCHAR(5);
Query OK, 5 rows affected (0.06 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> UPDATE FACULTY SET RESIGNED = 'YES' WHERE FACNO=7;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT*FROM FACULTY;
+-------+---------------+--------+------------+------------+----------+----------+
| FACNO | FACNAME       | GENDER | DOB        | DOJ        | MOBILENO | RESIGNED |
+-------+---------------+--------+------------+------------+----------+----------+
| 1111  | SUJI          | F      | 1989-01-20 | 2020-08-16 |    11111 | NULL     |
| 2222  | SANKAR GANESH | M      | 1978-05-30 | 2021-09-08 |    55555 | NULL     |
| 1     | SANKAR        | M      | 1991-03-12 | 2000-11-14 |    12345 | NULL     |
| 3     | SUJI          | F      | 1981-02-01 | 2002-09-24 |    98765 | NULL     |
| 7     | ANBU          | M      | 1978-12-21 | 1997-08-04 |   985615 | YES      |
+-------+---------------+--------+------------+------------+----------+----------+
5 rows in set (0.00 sec)

mysql> DELETE FROM FACULTY WHERE RESIGNED = 'YES';
Query OK, 1 row affected (0.01 sec)

mysql> SELECT*FROM FACULTY;
+-------+---------------+--------+------------+------------+----------+----------+
| FACNO | FACNAME       | GENDER | DOB        | DOJ        | MOBILENO | RESIGNED |
+-------+---------------+--------+------------+------------+----------+----------+
| 1111  | SUJI          | F      | 1989-01-20 | 2020-08-16 |    11111 | NULL     |
| 2222  | SANKAR GANESH | M      | 1978-05-30 | 2021-09-08 |    55555 | NULL     |
| 1     | SANKAR        | M      | 1991-03-12 | 2000-11-14 |    12345 | NULL     |
| 3     | SUJI          | F      | 1981-02-01 | 2002-09-24 |    98765 | NULL     |
+-------+---------------+--------+------------+------------+----------+----------+
4 rows in set (0.00 sec)
```
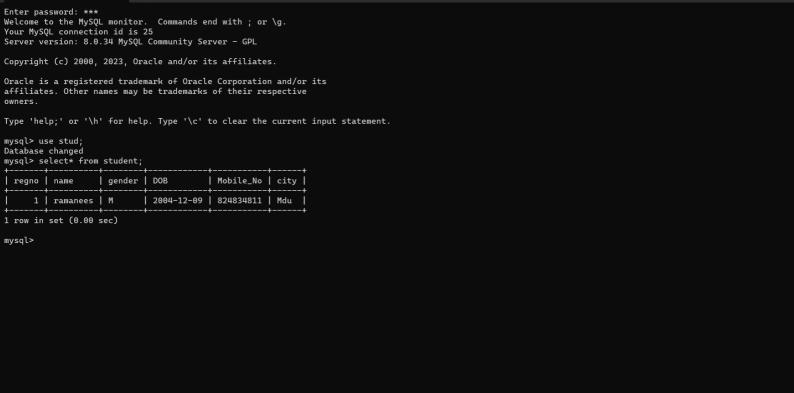
```
Enter password: ***
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 25
Server version: 8.0.34 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use stud;
Database changed
mysql> select* from student;
+-------+----------+--------+------------+------------+------+
| regno | name     | gender | DOB        | Mobile_No  | city |
+-------+----------+--------+------------+------------+------+
|     1 | ramanees | M      | 2004-12-09 | 824834811  | Mdu  |
+-------+----------+--------+------------+------------+------+
1 row in set (0.00 sec)

mysql>
```

```
mysql> create database faculty;
Query OK, 1 row affected (0.00 sec)

mysql> use faculty;
Database changed
mysql>  create table faculty( fac_no varchar(4),fac_name varchar(15),gender char(1),dob date,doj date,mobile_no int(10));
Query OK, 0 rows affected, 1 warning (0.02 sec)

mysql> insert into faculty values('123','kish','M','2004-12-09','2022-11-03',666777888);
Query OK, 1 row affected (0.01 sec)

mysql> select* from faculty;
+--------+----------+--------+------------+------------+-----------+
| fac_no | fac_name | gender | dob        | doj        | mobile_no |
+--------+----------+--------+------------+------------+-----------+
| 123    | kish     | M      | 2004-12-09 | 2022-11-03 | 666777888 |
+--------+----------+--------+------------+------------+-----------+
1 row in set (0.00 sec)

mysql>
```

```
mysql> insert into college values(3,'kishore','M',4834797,'saravana','35','dbms');
Query OK, 1 row affected (0.00 sec)

mysql> insert into college values(4,'praveen','M',456789,'saravana','35','dbms');
Query OK, 1 row affected (0.00 sec)

mysql> select stud_name,stud_gender,mobileno from college order by stud_regno asc;
+-----------+-------------+-----------+
| stud_name | stud_gender | mobileno  |
+-----------+-------------+-----------+
| vars      | F           |  35364563 |
| ram       | M           |  98347598 |
| kishore   | M           |   4834797 |
| praveen   | M           |    456789 |
+-----------+-------------+-----------+
4 rows in set (0.00 sec)

mysql> select* from college order by fac_age desc;
+------------+-----------+-------------+-----------+----------+---------+-------------+
| stud_regno | stud_name | stud_gender | mobileno  | fac_name | fac_age | course_name |
+------------+-----------+-------------+-----------+----------+---------+-------------+
|          1 | vars      | F           |  35364563 | mary     | 35      | dbms        |
|          2 | ram       | M           |  98347598 | mary     | 35      | dbms        |
|          3 | kishore   | M           |   4834797 | saravana | 35      | dbms        |
|          4 | praveen   | M           |    456789 | saravana | 35      | dbms        |
+------------+-----------+-------------+-----------+----------+---------+-------------+
4 rows in set (0.00 sec)

mysql> select count(course_name) from college;
+--------------------+
| count(course_name) |
+--------------------+
|                  4 |
+--------------------+
1 row in set (0.00 sec)

mysql>
```

```
mysql> use department;
Database changed
mysql> select* from department;
Empty set (0.00 sec)

mysql> insert into departement values('123','cse','ram');
ERROR 1146 (42S02): Table 'department.departement' doesn't exist
mysql> insert into department values('123','cse','ram');
Query OK, 1 row affected (0.00 sec)

mysql> select* from department;
+--------+-----------+-----------+
| dep_no | dept_name | dept_head |
+--------+-----------+-----------+
| 123    | cse       | ram       |
+--------+-----------+-----------+
```

```
mysql> SAVEPOINT MY_SAVEPOINT;
Query OK, 0 rows affected (0.00 sec)

mysql> ROLLBACK TO MY_SAVEPOINT;
ERROR 1305 (42000): SAVEPOINT MY_SAVEPOINT does not exist
mysql> ROLLBACK TO SAVEPOINT;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual
mysql> SAVEPOINT MY_SAVEPOINT;
Query OK, 0 rows affected (0.00 sec)

mysql> CREATE TABLE CLASS(ID INT PRIMARY KEY, NAME VARCHAR (30));
Query OK, 0 rows affected (0.03 sec)

mysql> SAVEPOINT SAVEPOINT1;
Query OK, 0 rows affected (0.00 sec)

mysql> INSERT INTO CLASS VALUES(1,'MATH'),
    -> (2,'PHYSICS'),
    -> (3,'BIOLOGY');
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> SAVEPOINT SAVEPOINT2;
Query OK, 0 rows affected (0.00 sec)

mysql> INSERT INTO CLASS VALUES(3,'HISTORY'),
    -> (5,'ENGLISH');
ERROR 1062 (23000): Duplicate entry '3' for key 'PRIMARY'
mysql> INSERT INTO CLASS VALUES(4,'HISTORY'),
    -> (5,'ENGLISH');
Query OK, 2 rows affected (0.01 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> SAVEPOINT SAVEPOINT3;
Query OK, 0 rows affected (0.00 sec)

mysql> ROLLBACK TO SAVEPOINT2;
ERROR 1305 (42000): SAVEPOINT SAVEPOINT2 does not exist
mysql> SELECT*FROM CLASS;
+----+---------+
| ID | NAME    |
+----+---------+
|  1 | MATH    |
|  2 | PHYSICS |
|  3 | BIOLOGY |
|  4 | HISTORY |
```

Interactive SQL Course

Input

```
create table emp as select * from workers;
```

Output

SQL query successfully executed. However, the result set is empty.

Emp [-]
- S_NO [int]
- name [text]
- designation [text]
- branch [text]
- salary [num]

Workers [-]
- S_NO [integer]
- name [varchar(25)]
- designation [varchar(25)]
- branch [varchar]
- salary [decimal(10,2)]

Available Tables

Emp

S_NO	name	designation	branch	salary
1	kannan	manager	chennai	
2	mahesh	supervisor	madurai	
3	mahesh	assistant	trichy	

Workers

S_NO	name	designation	branch	salary
1	kannan	manager	chennai	
2	mahesh	supervisor	madurai	
3	mahesh	assistant	trichy	

```
CREATE TABLE EMPLOYEE(
  S_NO INTEGER,
  NAME[varchar(25)],
  DESIGNATION[varchar(25)],
  BRANCH[varchar(25)]
);
```

Run SQL

Available Tables

Customers

customer_id	first_
1	John
2	Robe
3	Davi
4	John
5	Betty

EMPLOYEE

S_NO	NAME
empty	

```
CREATE TABLE EMPLOYEE(
  S_NO INTEGER,
  NAME[varchar(25)],
  DESIGNATION[varchar(25)],
  BRANCH[varchar(25)]
);
```

Run SQL

Available Tables

Customers

customer_id	first_name	last_name	age	country
1	John	Doe	31	USA
2	Robert	Luna	22	USA
3	David	Robinson	22	UK
4	John	Reinhardt	25	UK
5	Betty	Doe	28	UAE

EMPLOYEE

S_NO	NAME	DESIGNATION	BRANCH
empty			

```
insert into employee values(1,'suresh','manager','chennai');
insert into employee values(2,'ramesh','supervisor','madurai');
insert into employee values(3,'hari','assistant','trichy');
```

Customers

customer_id	first_name	last_name	age	country
1	John	Doe	31	USA
2	Robert	Luna	22	USA
3	David	Robinson	22	UK
4	John	Reinhardt	25	UK
5	Betty	Doe	28	UAE

EMPLOYEE

S_NO	NAME	DESIGNATION	BRANCH
1	suresh	manager	chennai
2	ramesh	supervisor	madurai
3	hari	assistant	trichy

```
alter TABLE EMPLOYEE add salary
```

Output

Customers

customer_id	first_name	last_name	age	country
1	John	Doe	31	USA
2	Robert	Luna	22	USA
3	David	Robinson	22	UK
4	John	Reinhardt	25	UK
5	Betty	Doe	28	UAE

EMPLOYEE

S_NO	NAME	DESIGNATION	BRANCH	salary
1	suresh	manager	chennai	
2	ramesh	supervisor	madurai	
3	hari	assistant	trichy	

```
UPDATE EMPLOYEE
SET salary=12000
where s_no=3;
```

Customers

customer_id	first_name	last_name	age	country
1	John	Doe	31	USA
2	Robert	Luna	22	USA
3	David	Robinson	22	UK
4	John	Reinhardt	25	UK
5	Betty	Doe	28	UAE

EMPLOYEE

S_NO	NAME	DESIGNATION	BRANCH	salary
1	suresh	manager	chennai	12000
2	ramesh	supervisor	madurai	12000
3	hari	assistant	trichy	12000

```sql
alter table 'employee' rename to 'emp'
```

Customers

customer_id	first_name	last_name	age	country
1	John	Doe	31	USA
2	Robert	Luna	22	USA
3	David	Robinson	22	UK
4	John	Reinhardt	25	UK
5	Betty	Doe	28	UAE

Emp

S_NO	NAME	DESIGNATION	BRANCH	salary
1	suresh	manager	chennai	12000
2	ramesh	supervisor	madurai	12000
3	hari	assistant	trichy	12000

Input

```
alter table EMP
rename  BRANCH TO ADDRESS
```

Available Tables

Customers

customer_id	first_name	last_name	age	country
1	John	Doe	31	USA
2	Robert	Luna	22	USA
3	David	Robinson	22	UK
4	John	Reinhardt	25	UK
5	Betty	Doe	28	UAE

EMP

S_NO	NAME	DESIGNATION	ADDRESS	salary
1	suresh	manager	chennai	12000
2	ramesh	supervisor	madurai	12000
3	hari	assistant	trichy	12000

```
DELETE FROM EMP
WHERE S_NO=2;
```

Customers

customer_id	first_name	last_name	age	country
1	John	Doe	31	USA
2	Robert	Luna	22	USA
3	David	Robinson	22	UK
4	John	Reinhardt	25	UK
5	Betty	Doe	28	UAE

EMP

S_NO	NAME	DESIGNATION	ADDRESS	salary
1	suresh	manager	chennai	12000
3	hari	assistant	trichy	12000

```
CREATE TABLE BANK(
  S_NO integer,
  cust_name[varchar(25)],
  acc_no integer,
  balance integer,
  cus_branch[varchar(25)]
  );
```

Run SQL

Available Tables

BANK

S_NO	cust_name	acc_no	balance	cus_branch
empty				

```
insert into BANK values(1,'ramesh','12378','100000','adyar');
insert into BANK values(2,'sam','12367','152500','mylapore');
insert into BANK values(3,'harish','12345','250000','anna salai');
```

BANK

S_NO	cust_name	acc_no	balance	cus_branch
1	ramesh	12378	100000	adyar
2	sam	12367	152500	mylapore
3	harish	12345	250000	anna salai

```sql
select * from bank;
```

Output

S_NO	cust_name	acc_no	balance	cus_branch
1	ramesh	12378	100000	adyar
2	sam	12367	152500	mylapore
3	harish	12345	250000	anna salai

```sql
select * from bank where cust_name ="ramesh"
```

Output

S_NO	cust_name	acc_no	balance	cus_branch
1	ramesh	12378	100000	adyar

```
select * from bank where balance between 100000 and 200000
```

Output

S_NO	cust_name	acc_no	balance	cus_branch
1	ramesh	12378	100000	adyar
2	sam	12367	152500	mylapore

```
select * from bank where balance>150000
```

Output

S_NO	cust_name	acc_no	balance	cus_branch
2	sam	12367	152500	mylapore
3	harish	12345	250000	anna salai

```
update bank set cus_branch ="poonamallee"
where s_no=2;
```

BANK

S_NO	cust_name	acc_no	balance	cus_branch
1	ramesh	12378	100000	adyar
2	sam	12367	152500	poonamallee
3	harish	12345	250000	anna salai

```
CREATE TABLE book(
  S_NO INTEGER,
  book name[varchar(25)],
  author[varchar(25)],
  price integer,
  publisher[varchar(25)]
);

insert into book values(1,'dbms','seema kedhar',250,'charulatha');
insert into book values(2,'toc','john martin',400,'tata mcgraw hill');
insert into book values(3,'c prog','balagurusamy',300,'technical');
```

Book

S_NO	book	author	price	publisher
1	dbms	seema kedhar	250	charulatha
2	toc	john martin	400	tata mcgraw hill
3	c prog	balagurusamy	300	technical

Customers

```sql
select * from book;
```

Run SQL

Output

S_NO	book	author	price	publisher
1	dbms	seema kedhar	250	charulatha
2	toc	john martin	400	tata mcgraw hill
3	c prog	balagurusamy	300	technical

Run SQL

```
select * from book
where price >=300;
```

Output

S_NO	book	author	price	publisher
2	toc	john martin	400	tata mcgraw hill
3	c prog	balagurusamy	300	technical

```
insert into book values(4,'m2',"balji",500,"amrutha");
```

Run SQL

Book

S_NO	book	author	price	publisher
1	dbms	seema kedhar	250	charulatha
2	toc	john martin	400	tata mcgraw hill
3	c prog	balagurusamy	300	technical
4	m2	balji	500	amrutha

```
CREATE TABLE student(
  S_NO INTEGER,
  name[varchar(25)],
  subject[varchar(25)],
  mark integer
  );

insert into student values(1,'somu','os',75);
insert into student values(2,'sankar','dbms',66);
insert into student values(3,'mahesh','mobile computing',92);
```

Run SQL

Available Tables

Student

S_NO	name	subject	mark
1	somu	os	75
2	sankar	dbms	66
3	mahesh	mobile computing	92

```
alter table book drop column author;
```

Run SQL

Book

S_NO	book	price	publisher
1	dbms	250	charulatha
2	toc	400	tata mcgraw hill
3	c prog	300	technical
4	m2	500	amrutha

```
alter table student
add cloumn name varchar;
```

Run SQL

Available Tables

Student

S_NO	name	subject	mark	grade	cloumn
1	somu	os	75		
2	sankar	dbms	66		
3	mahesh	mobile computing	92		

Input

```sql
alter table student
add grade varchar(2);
```

⛶ 🌙 ⋮ **Run SQL**

Available Tables

Student

S_NO	name	subject	mark	grade
1	somu	os	75	
2	sankar	dbms	66	
3	mahesh	mobile computing	92	

```
CREATE TABLE student(
  S_NO INTEGER,
  name[varchar(25)],
  subject[varchar(25)],
  mark integer
  );

insert into student values(1,'somu','os',75);
insert into student values(2,'sankar','dbms',66);
insert into student values(3,'mahesh','mobile computing',92);
```

Run SQL

Available Tables

Student

S_NO	name	subject	mark
1	somu	os	75
2	sankar	dbms	66
3	mahesh	mobile computing	92

```
delete from student
where s_no=2;
```

Run SQL

Available Tables

Student

S_NO	name	subject	mark	grade	cloumn
1	somu	os	75		
3	mahesh	mobile computing	92		

Sub

S_NO	name	subject	mark	grade	cloumn
1	somu	os	75		
2	sankar	dbms	66		
3	mahesh	mobile computing	92		

```
drop table student;
```

Run SQL

Available Tables

Sub

S_NO	name	subject	mark	grade	cloumn
1	somu	os	75		
2	sankar	dbms	66		
3	mahesh	mobile computing	92		

```
CREATE TABLE workers(
  S_NO INTEGER,
  name[varchar(25)],
  designation[varchar(25)],
  branch [varchar]
  );

insert into workers values(1,'kannan','manager',"chennai");
insert into workers values(2,'mahesh','supervisor',"madurai");
insert into workers values(3,'mahesh','assistant',"trichy");
```

Workers

S_NO	name	designation	branch
1	kannan	manager	chennai
2	mahesh	supervisor	madurai
3	mahesh	assistant	trichy

Output

```
alter table workers
add salary decimal(10,2);
```

Run SQL

Available Tables

Workers

S_NO	name	designation	branch	salary
1	kannan	manager	chennai	
2	mahesh	supervisor	madurai	
3	mahesh	assistant	trichy	

```
alter table workers
add salary decimal(10,2);
```

Run SQL

Available Tables

Workers

S_NO	name	designation	branch	salary
1	kannan	manager	chennai	
2	mahesh	supervisor	madurai	
3	mahesh	assistant	trichy	

Input

```sql
create table sub as select * from student;
```

Run SQL

Output

Available Tables

Student

S_NO	name	subject	mark	grade	cloumn
1	somu	os	75		
2	sankar	dbms	66		
3	mahesh	mobile computing	92		

Sub

S_NO	name	subject	mark	grade	cloumn
1	somu	os	75		
2	sankar	dbms	66		
3	mahesh	mobile computing	92		