mysql> use speedup db; Database changed

mysql> create table students(student id int primary key auto increment, name varchar(50) not null, age int not null, gender enum('male', 'female') not null, course varchar(50) not null, admission\_date date not null, fees\_paid decimal(10,2) not null);

Query OK, 0 rows affected (0.03 sec)

## mysql> describe students;

Field	Туре	+   Null	Key	Default	Extra
student_id name age gender course admission_date fees_paid	int(11) varchar(50) int(11) enum('male','female') varchar(50) date decimal(10,2)	NO   NO   NO   NO   NO   NO   NO	PRI	NULL NULL NULL NULL NULL NULL	auto_increment         

7 rows in set (0.03 sec)

mysql> insert into students (name, age, gender, course, admission date, fees paid) values

```
-> ('Amit Sharma', 22, 'male', 'B.Tech', '2024-01-10', 50000.00),
```

```
-> ('Rohan Das', 23, 'male', 'MBA', '2023-09-15', 57000.00),
```

-> ('Megha Jain', 22, 'female', 'B.Sc', '2024-02-20', 48000.00);

Query OK, 10 rows affected (0.07 sec)

Records: 10 Duplicates: 0 Warnings: 0

```
mysql> select * from students;
```

```
+-----+
| student id | name
             | age | gender | course | admission_date | fees_paid |
```

<sup>-&</sup>gt; ('Priya Singh', 21, 'female', 'MCA', '2024-02-15', 60000.00),

<sup>-&</sup>gt; (Priya Singh, 21, Temale, MCA, 2024-02-15, 60000.00),
-> ('Rahul Verma', 23, 'male', 'MBA', '2023-12-20', 55000.00),
-> ('Neha Patil', 20, 'female', 'B.Sc', '2024-03-05', 45000.00),
-> ('Suresh Reddy', 24, 'male', 'B.Tech', '2023-11-10', 52000.00),
-> ('Divya Nair', 22, 'female', 'MCA', '2024-04-12', 65000.00),
-> ('Vikas Mehta', 25, 'male', 'BBA', '2023-10-05', 40000.00),
-> ('Ananya Rao', 21, 'female', 'B.Tech', '2024-01-25', 53000.00),

+		+		+	+	+	++
i	1	Amit Sharma	22	male	B.Tech	2024-01-10	50000.00
	2	Priya Singh	21	female	MCA	2024-02-15	60000.00
	3	Rahul Verma	23	male	MBA	2023-12-20	55000.00
	4	Neha Patil	20	female	B.Sc	2024-03-05	45000.00
	5	Suresh Reddy	24	male	B.Tech	2023-11-10	52000.00
	6	Divya Nair	22	female	MCA	2024-04-12	65000.00
	7	Vikas Mehta	25	male	BBA	2023-10-05	40000.00
	8	Ananya Rao	21	female	B.Tech	2024-01-25	53000.00
	9	Rohan Das	23	male	MBA	2023-09-15	57000.00
	10	Megha Jain	22	female	B.Sc	2024-02-20	48000.00

mysql> select name, course, fees\_paid from students;

name	course	++   fees_paid
Amit Sharma Priya Singh Rahul Verma Neha Patil Suresh Reddy Divya Nair Vikas Mehta Ananya Rao Rohan Das Megha Jain	B.Tech MCA MBA B.Sc B.Tech MCA BBA B.Tech MBA B.Sc	50000.00   60000.00   55000.00   45000.00   52000.00   65000.00   40000.00   53000.00   57000.00   48000.00

10 rows in set (0.00 sec)

mysql> select \* from students where age > 21;

4		+	+	<b></b>	+	<b></b>	+
	student_id	name	age	gender	course	admission_date	fees_paid
	1	Amit Sharma	22	male	B.Tech	2024-01-10	50000.00
	3	Rahul Verma	23	male	MBA	2023-12-20	55000.00
	5	Suresh Reddy	24	male	B.Tech	2023-11-10	52000.00
	6	Divya Nair	22	female	MCA	2024-04-12	65000.00
	7	Vikas Mehta	25	male	BBA	2023-10-05	40000.00
	9	Rohan Das	23	male	MBA	2023-09-15	57000.00
	10	Megha Jain	22	female	B.Sc	2024-02-20	48000.00

7 rows in set (0.01 sec)

mysql> select \* from students where course = 'B.Tech';

student_id	name	age	gender	course	admission_date	fees_paid
1 5	Amit Sharma   Suresh Reddy   Ananya Rao	22   24	male   male	B.Tech	2024-01-10   2023-11-10   2024-01-25	50000.00   52000.00   53000.00

3 rows in set (0.00 sec)

mysql> select \* from students where fees\_paid > 50000;

student_id	name	age	gender	course	admission_date	fees_paid
2     3     5     6     8	Priya Singh Rahul Verma Suresh Reddy Divya Nair Ananya Rao Rohan Das	21 23 24 22 21 23		MCA   MBA   B.Tech   MCA   B.Tech   MBA	2024-02-15 2023-12-20 2023-11-10 2024-04-12 2024-01-25 2023-09-15	60000.00     55000.00     52000.00     65000.00     53000.00

6 rows in set (0.01 sec)

mysql> select \* from students where admission\_date like '2024%';

_	L	L	L	L	L	L	LL
	student_id	•	age	. •		admission_date	
	1	Amit Sharma	22	male	B.Tech	2024-01-10	50000.00
	2	Priya Singh	21	female	MCA	2024-02-15	60000.00
	4	Neha Patil	20	female	B.Sc	2024-03-05	45000.00
	6	Divya Nair	22	female	MCA	2024-04-12	65000.00
	8	Ananya Rao	21	female	B.Tech	2024-01-25	53000.00
	10	Megha Jain	22	female	B.Sc	2024-02-20	48000.00
_	T	r	r	r			r

6 rows in set (0.01 sec)

mysql> select \* from students where fees\_paid between 45000 AND 55000;

	student_id	name	age	gender	course		
	3	Amit Sharma   Rahul Verma   Neha Patil	22 23		B.Tech	2024-01-10   2023-12-20   2024-03-05	50000.00   55000.00   45000.00

5	Suresh Reddy	24	male	B.Tech	2023-11-10	52000.00
8	Ananya Rao	21	female	B.Tech	2024-01-25	53000.00
10	Megha Jain	22	female	B.Sc	2024-02-20	48000.00

mysql> select \* from students where age between 21 AND 23;

student_id	name	   age	gender	course	admission_date	+   fees_paid
1   2   3   6   8   9	Amit Sharma   Priya Singh   Rahul Verma   Divya Nair   Ananya Rao   Rohan Das   Megha Jain	22   21   23   22   21   23   22	male   female   male   female   female   male   female	B.Tech   MCA   MBA   MCA   MCA   MCA   B.Tech   MBA	2024-01-10   2024-02-15   2023-12-20   2024-04-12   2024-01-25   2023-09-15   2024-02-20	50000.00   60000.00   55000.00   65000.00   53000.00   57000.00

7 rows in set (0.00 sec)

mysql> select \* from students order by fees\_paid;

4		L		L	L	L	L
  -	student_id	name	age	gender	course	admission_date	   fees_paid
İ	7	Vikas Mehta	25	male	ВВА	2023-10-05	40000.00
-	4	Neha Patil	20	female	B.Sc	2024-03-05	45000.00
	10	Megha Jain	22	female	B.Sc	2024-02-20	48000.00
	1	Amit Sharma	22	male	B.Tech	2024-01-10	50000.00
-	5	Suresh Reddy	24	male	B.Tech	2023-11-10	52000.00
	8	Ananya Rao	21	female	B.Tech	2024-01-25	53000.00
	3	Rahul Verma	23	male	MBA	2023-12-20	55000.00
	9	Rohan Das	23	male	MBA	2023-09-15	57000.00
	2	Priya Singh	21	female	MCA	2024-02-15	60000.00
Ì	6	Divya Nair	22	female	MCA	2024-04-12	65000.00
4					L	L	<del></del>

10 rows in set (0.00 sec)

mysql> select \* from students order by admission\_date desc;

_		L		L	L	+	
	student_id	•	age	gender	course	admission_date	fees_paid
	6	Divya Nair   Neha Patil	22	female   female	MCA	2024-04-12   2024-03-05	65000.00     45000.00
		Megha Jain		female	!	2024-02-20	48000.00

2   8   1   3   5	Priya Singh   Ananya Rao   Amit Sharma   Rahul Verma   Suresh Reddy   Vikas Mehta	21   21   22   23   24   25	female   female   male   male   male	MCA   B.Tech   B.Tech   MBA   B.Tech   BBA	2024-02-15   2024-01-25   2024-01-10   2023-12-20   2023-11-10   2023-10-05	60000.00   53000.00   50000.00   55000.00   52000.00   40000.00
7   9	Vikas Mehta   Rohan Das +	25   23 +	male   male +	BBA   MBA +	2023-10-05   2023-09-15 +	40000.00     57000.00

mysql> select \* from students order by fees\_paid limit 3;

student_id	•	•	•	•	   admission_date	•
j 4	Vikas Mehta   Neha Patil   Megha Jain	20 22	female	•	2023-10-05   2024-03-05   2024-02-20	40000.00     45000.00     48000.00

3 rows in set (0.00 sec)

mysql> select \* from students order by fees\_paid desc limit 3;

student_id	name	•	-		   admission_date	•
j 2	Divya Nair   Priya Singh   Rohan Das	21	female female male	MCA   MCA   MBA	2024-04-12 2024-02-15 2023-09-15	65000.00     60000.00     57000.00

3 rows in set (0.00 sec)

mysql> select \* from students order by admission\_date limit 2;

student_id	name	age	gender	course	   admission_date 	fees_paid
	Rohan Das		male	MBA	2023-09-15	57000.00
9	Vikas Mehta	23	male	BBA	2023-10-05	40000.00

2 rows in set (0.00 sec)

mysql> update students set course='M.Tech' where name='Amit Sharma';

Query OK, 1 row affected (0.02 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from students;

_				L	L	L	L L
	student_id	name	age	gender	course	admission_date	fees_paid
	1	Amit Sharma	22	male	M.Tech	2024-01-10	50000.00
	2	Priya Singh	21	female	MCA	2024-02-15	60000.00
	3	Rahul Verma	23	male	MBA	2023-12-20	55000.00
	4	Neha Patil	20	female	B.Sc	2024-03-05	45000.00
	5	Suresh Reddy	24	male	B.Tech	2023-11-10	52000.00
	6	Divya Nair	22	female	MCA	2024-04-12	65000.00
	7	Vikas Mehta	25	male	BBA	2023-10-05	40000.00
	8	Ananya Rao	21	female	B.Tech	2024-01-25	53000.00
	9	Rohan Das	23	male	MBA	2023-09-15	57000.00
	10	Megha Jain	22	female	B.Sc	2024-02-20	48000.00
4	<b></b>			+	+	+	++

mysql> update students set fees\_paid = fees\_paid + 5000 where course='B.Tech';
Query OK, 2 rows affected (0.02 sec)
Rows matched: 2 Changed: 2 Warnings: 0

mysql> select \* from students;

+	L		L	L	L	+
student_id	name	age	gender	course	admission_date	fees_paid
	Amit Sharma	22	male	M.Tech	2024-01-10	50000.00
2   3	Priya Singh   Rahul Verma	21   23	female   male	MCA   MBA	2024-02-15   2023-12-20	60000.00     55000.00
4	Neha Patil	20	female	B.Sc	2024-03-05	45000.00
5	Suresh Reddy	24	male	B.Tech	2023-11-10	57000.00
6	Divya Nair	22	female	MCA	2024-04-12	65000.00
7	Vikas Mehta	25	male	BBA	2023-10-05	40000.00
8	Ananya Rao	21	female	B.Tech	2024-01-25	58000.00
9	Rohan Das	23	male	MBA	2023-09-15	57000.00
10	Megha Jain 	22 	female 	B.Sc +	2024-02-20 +	48000.00

10 rows in set (0.00 sec)

mysql> delete from students where student\_id = 3; Query OK, 1 row affected (0.02 sec)

mysql> select \* from students;

++++++++	
student_id   name	s naid l
Jeadene_id   name	_para
+	

1	Amit Sharma	22	male	M.Tech	2024-01-10	50000.00
2	Priya Singh	21	female	MCA	2024-02-15	60000.00
4	Neha Patil	20	female	B.Sc	2024-03-05	45000.00
5	Suresh Reddy	24	male	B.Tech	2023-11-10	57000.00
6	Divya Nair	22	female	MCA	2024-04-12	65000.00
7	Vikas Mehta	25	male	BBA	2023-10-05	40000.00
8	Ananya Rao	21	female	B.Tech	2024-01-25	58000.00
9	Rohan Das	23	male	MBA	2023-09-15	57000.00
10	Megha Jain	22	female	B.Sc	2024-02-20	48000.00
+	+	+	+	+	+	++

mysql> delete from students where fees\_paid < 50000; Query OK, 3 rows affected (0.02 sec)

mysql> select \* from students;

٠		L		L	L	L	LL
	student_id	name	age	gender	course	admission_date	fees_paid
İ	1	Amit Sharma	22	male	M.Tech	2024-01-10	50000.00
	2	Priya Singh	21	female	MCA	2024-02-15	60000.00
	5	Suresh Reddy	24	male	B.Tech	2023-11-10	57000.00
	6	Divya Nair	22	female	MCA	2024-04-12	65000.00
	8	Ananya Rao	21	female	B.Tech	2024-01-25	58000.00
	9	Rohan Das	23	male	MBA	2023-09-15	57000.00
4				+	<b>⊦</b>	+	+

6 rows in set (0.00 sec)

mysql> select course, sum(fees\_paid) as total\_fees\_per\_course from students group
by course;

+	
course	total_fees_per_course
B.Tech	115000.00
M.Tech	50000.00
MBA	57000.00
MCA	125000.00
+	++

4 rows in set (0.00 sec)

mysql> select course,count(\*) from students group by course;

```
+----+
| course | count(*) |
+----+
```

4 rows in set (0.00 sec)