create database students;

Query OK, 1 row affected (0.04 sec)

mysql> use students;

Database changed

1. **A)** mysql> create table studentprofile(rollno int,name varchar(20) not null,dob date,department varchar(20) not null,city varchar(10));

Query OK, 0 rows affected (0.09 sec)

mysql> desc studentprofile;

+------------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+------------+-------------+------+-----+---------+-------+

| rollno | int | YES | | NULL | |

| name | varchar(20) | NO | | NULL | |

| dob | date | YES | | NULL | |

| department | varchar(20) | NO | | NULL | |

| city | varchar(10) | YES | | NULL | |

+------------+-------------+------+-----+---------+-------+

5 rows in set (0.01 sec)

mysql>

**B)** mysql> create table marks(rollno int,name varchar(20) not null,mark1 int,mark2 int);

Query OK, 0 rows affected (0.03 sec)

mysql> desc marks;

+--------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+--------+-------------+------+-----+---------+-------+

| rollno | int | YES | | NULL | |

| name | varchar(20) | NO | | NULL | |

| mark1 | int | YES | | NULL | |

| mark2 | int | YES | | NULL | |

+--------+-------------+------+-----+---------+-------+

4 rows in set (0.00 sec)

mysql>

1. **A) insert in studentprofile**

mysql> insert into studentprofile values(01,"Ramkumar","1999-02-26","B.SC IT","coimbatore"),(02,"Surya.R","2002-03-21","BCA","Ooty"),(03,"Subash","2004-04-23","BE-mech","Coimbatore");

Query OK, 3 rows affected (0.01 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> insert into studentprofile values(04,"Suresh","2002-04-24","EEE","Kovai"),(05,"Elambarathi","2006-03-23","BSC CT","chennai");

Query OK, 2 rows affected (0.00 sec)

Records: 2 Duplicates: 0 Warnings: 0

mysql> select \* from studentprofile;

+--------+-------------+------------+------------+------------+

| rollno | name | dob | department | city |

+--------+-------------+------------+------------+------------+

| 1 | Ramkumar | 1999-02-26 | B.SC IT | coimbatore |

| 2 | Surya.R | 2002-03-21 | BCA | Ooty |

| 3 | Subash | 2004-04-23 | BE-mech | Coimbatore |

| 4 | Suresh | 2002-04-24 | EEE | Kovai |

| 5 | Elambarathi | 2006-03-23 | BSC CT | chennai |

+--------+-------------+------------+------------+------------+

5 rows in set (0.00 sec)

mysql>

**B)** mysql> insert into marks values(1,"Ramkumar",89,98),(2,"Surya.R",78,89),(3,"Subash",96,76),(4,"Suresh",97,78),(5,"Elamnbrathi",89,86);

Query OK, 5 rows affected (0.01 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> select \* from marks;

+--------+-------------+-------+-------+

| rollno | name | mark1 | mark2 |

+--------+-------------+-------+-------+

| 1 | Ramkumar | 89 | 98 |

| 2 | Surya.R | 78 | 89 |

| 3 | Subash | 96 | 76 |

| 4 | Suresh | 97 | 78 |

| 5 | Elamnbrathi | 89 | 86 |

+--------+-------------+-------+-------+

5 rows in set (0.00 sec)

mysql>

**3.** mysql> alter table marks add totalmarks int;

Query OK, 0 rows affected (0.04 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \* from marks;

+--------+-------------+-------+-------+------------+

| rollno | name | mark1 | mark2 | totalmarks |

+--------+-------------+-------+-------+------------+

| 1 | Ramkumar | 89 | 98 | NULL |

| 2 | Surya.R | 78 | 89 | NULL |

| 3 | Subash | 96 | 76 | NULL |

| 4 | Suresh | 97 | 78 | NULL |

| 5 | Elamnbrathi | 89 | 86 | NULL |

+--------+-------------+-------+-------+------------+

5 rows in set (0.00 sec)

mysql>

**4.** mysql> alter table studentprofile change dob dateofbirth int;

Query OK, 5 rows affected (0.04 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> desc studentprofile;

+-------------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+-------------+------+-----+---------+-------+

| rollno | int | YES | | NULL | |

| name | varchar(20) | NO | | NULL | |

| dateofbirth | int | YES | | NULL | |

| department | varchar(20) | NO | | NULL | |

| city | varchar(10) | YES | | NULL | |

+-------------+-------------+------+-----+---------+-------+

5 rows in set (0.00 sec)

mysql>

**5.** mysql> desc studentprofile;

+-------------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-------------+-------------+------+-----+---------+-------+

| rollno | int | YES | | NULL | |

| name | varchar(20) | NO | | NULL | |

| dateofbirth | int | YES | | NULL | |

| department | varchar(20) | NO | | NULL | |

| city | varchar(10) | YES | | NULL | |

+-------------+-------------+------+-----+---------+-------+

5 rows in set (0.00 sec)

mysql> desc marks;

+------------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+------------+-------------+------+-----+---------+-------+

| rollno | int | YES | | NULL | |

| name | varchar(20) | NO | | NULL | |

| mark1 | int | YES | | NULL | |

| mark2 | int | YES | | NULL | |

| totalmarks | int | YES | | NULL | |

+------------+-------------+------+-----+---------+-------+

5 rows in set (0.00 sec)

mysql>

**6.** mysql> show tables;

+--------------------+

| Tables\_in\_students |

+--------------------+

| marks |

| studentprofile |

+--------------------+

2 rows in set (0.00 sec)

mysql>

**7.** mysql> update marks set totalmarks=mark1+mark2;

Query OK, 5 rows affected (0.01 sec)

Rows matched: 5 Changed: 5 Warnings: 0

mysql> select \* from marks;

+--------+-------------+-------+-------+------------+

| rollno | name | mark1 | mark2 | totalmarks |

+--------+-------------+-------+-------+------------+

| 1 | Ramkumar | 89 | 98 | 187 |

| 2 | Surya.R | 78 | 89 | 167 |

| 3 | Subash | 96 | 76 | 172 |

| 4 | Suresh | 97 | 78 | 175 |

| 5 | Elamnbrathi | 89 | 86 | 175 |

+--------+-------------+-------+-------+------------+

5 rows in set (0.00 sec)

mysql>

**8.**

mysql> select \* from studentprofile;

+--------+-------------+-------------+------------+------------+

| rollno | name | dateofbirth | department | city |

+--------+-------------+-------------+------------+------------+

| 1 | Ramkumar | 19990226 | B.SC IT | coimbatore |

| 2 | Surya.R | 20020321 | BCA | Ooty |

| 3 | Subash | 20040423 | BE-mech | Coimbatore |

| 5 | Elambarathi | 20060323 | BSC CT | chennai |

+--------+-------------+-------------+------------+------------+

4 rows in set (0.00 sec)

mysql>

**9.** mysql> select \* from studentprofile,marks;

+--------+-------------+-------------+------------+------------+--------+-------------+-------+-------+------------+

| rollno | name | dateofbirth | department | city | rollno | name | mark1 | mark2 | totalmarks |

+--------+-------------+-------------+------------+------------+--------+-------------+-------+-------+------------+

| 5 | Elambarathi | 20060323 | BSC CT | chennai | 1 | Ramkumar | 89 | 98 | 187 |

| 3 | Subash | 20040423 | BE-mech | Coimbatore | 1 | Ramkumar | 89 | 98 | 187 |

| 2 | Surya.R | 20020321 | BCA | Ooty | 1 | Ramkumar | 89 | 98 | 187 |

| 1 | Ramkumar | 19990226 | B.SC IT | coimbatore | 1 | Ramkumar | 89 | 98 | 187 |

| 5 | Elambarathi | 20060323 | BSC CT | chennai | 2 | Surya.R | 78 | 89 | 167 |

| 3 | Subash | 20040423 | BE-mech | Coimbatore | 2 | Surya.R | 78 | 89 | 167 |

| 2 | Surya.R | 20020321 | BCA | Ooty | 2 | Surya.R | 78 | 89 | 167 |

| 1 | Ramkumar | 19990226 | B.SC IT | coimbatore | 2 | Surya.R | 78 | 89 | 167 |

| 5 | Elambarathi | 20060323 | BSC CT | chennai | 3 | Subash | 96 | 76 | 172 |

| 3 | Subash | 20040423 | BE-mech | Coimbatore | 3 | Subash | 96 | 76 | 172 |

| 2 | Surya.R | 20020321 | BCA | Ooty | 3 | Subash | 96 | 76 | 172 |

| 1 | Ramkumar | 19990226 | B.SC IT | coimbatore | 3 | Subash | 96 | 76 | 172 |

| 5 | Elambarathi | 20060323 | BSC CT | chennai | 4 | Suresh | 97 | 78 | 175 |

| 3 | Subash | 20040423 | BE-mech | Coimbatore | 4 | Suresh | 97 | 78 | 175 |

| 2 | Surya.R | 20020321 | BCA | Ooty | 4 | Suresh | 97 | 78 | 175 |

| 1 | Ramkumar | 19990226 | B.SC IT | coimbatore | 4 | Suresh | 97 | 78 | 175 |

| 5 | Elambarathi | 20060323 | BSC CT | chennai | 5 | Elamnbrathi | 89 | 86 | 175 |

| 3 | Subash | 20040423 | BE-mech | Coimbatore | 5 | Elamnbrathi | 89 | 86 | 175 |

| 2 | Surya.R | 20020321 | BCA | Ooty | 5 | Elamnbrathi | 89 | 86 | 175 |

| 1 | Ramkumar | 19990226 | B.SC IT | coimbatore | 5 | Elamnbrathi | 89 | 86 | 175 |

+--------+-------------+-------------+------------+------------+--------+-------------+-------+-------+------------+

20 rows in set (0.00 sec)

mysql>

**10.** mysql> insert into studentprofile values(4,"Suresh","20020326","MSC","Kovai");

Query OK, 1 row affected (0.00 sec)

mysql> select \* from studentprofile;

+--------+-------------+-------------+------------+------------+

| rollno | name | dateofbirth | department | city |

+--------+-------------+-------------+------------+------------+

| 1 | Ramkumar | 19990226 | B.SC IT | coimbatore |

| 2 | Surya.R | 20020321 | BCA | Ooty |

| 3 | Subash | 20040423 | BE-mech | Coimbatore |

| 5 | Elambarathi | 20060323 | BSC CT | chennai |

| 4 | Suresh | 20020326 | MSC | Kovai |

+--------+-------------+-------------+------------+------------+

5 rows in set (0.00 sec)

mysql>

**11.** mysql> alter table marks add average int;

Query OK, 0 rows affected (0.02 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table marks add grade int;

Query OK, 0 rows affected (0.01 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select \* from marks;

+--------+-------------+-------+-------+------------+---------+-------+

| rollno | name | mark1 | mark2 | totalmarks | average | grade |

+--------+-------------+-------+-------+------------+---------+-------+

| 1 | Ramkumar | 89 | 98 | 187 | NULL | NULL |

| 2 | Surya.R | 78 | 89 | 167 | NULL | NULL |

| 3 | Subash | 96 | 76 | 172 | NULL | NULL |

| 4 | Suresh | 97 | 78 | 175 | NULL | NULL |

| 5 | Elamnbrathi | 89 | 86 | 175 | NULL | NULL |

+--------+-------------+-------+-------+------------+---------+-------+

5 rows in set (0.00 sec)

mysql> select

**12.** mysql> update marks set average=totalmarks/5;

Query OK, 5 rows affected (0.01 sec)

Rows matched: 5 Changed: 5 Warnings: 0

mysql> select \* from marks;

+--------+-------------+-------+-------+------------+---------+-------+

| rollno | name | mark1 | mark2 | totalmarks | average | grade |

+--------+-------------+-------+-------+------------+---------+-------+

| 1 | Ramkumar | 89 | 98 | 187 | 37 | NULL |

| 2 | Surya.R | 78 | 89 | 167 | 33 | NULL |

| 3 | Subash | 96 | 76 | 172 | 34 | NULL |

| 4 | Suresh | 97 | 78 | 175 | 35 | NULL |

| 5 | Elamnbrathi | 89 | 86 | 175 | 35 | NULL |

+--------+-------------+-------+-------+------------+---------+-------+

5 rows in set (0.00 sec)

mysql>

**13.** mysql> update marks set grade="pass" where mark1>40 and mark2>40;

Query OK, 4 rows affected (0.00 sec)

Rows matched: 4 Changed: 4 Warnings: 0

mysql> update marks set grade="fail" where mark1<40 and mark2<40;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select \* from marks;

+--------+-------------+-------+-------+------------+---------+-------+

| rollno | name | mark1 | mark2 | totalmarks | average | grade |

+--------+-------------+-------+-------+------------+---------+-------+

| 1 | Ramkumar | 89 | 98 | 187 | 37 | pass |

| 2 | Surya.R | 78 | 89 | 167 | 33 | pass |

| 3 | Subash | 96 | 76 | 172 | 34 | pass |

| 4 | Suresh | 35 | 36 | 175 | 35 | fail |

| 5 | Elamnbrathi | 89 | 86 | 175 | 35 | pass |

+--------+-------------+-------+-------+------------+---------+-------+

5 rows in set (0.00 sec)

**14.** mysql> delete from marks where average;

Query OK, 5 rows affected (0.00 sec)

mysql> select \* from marks;

Empty set (0.00 sec)

**15.** mysql> select \* from marks;

Empty set (0.00 sec)

mysql> select \* from marks;

Empty set (0.00 sec)