BLood Management System

Blood_Management Table

```
MariaDB [project]> create table Blood_Management(m_id int primary key, m_name varchar(10), m_contact_no
varchar(12));
Query OK, 0 rows affected (0.020 sec)

MariaDB [project]> insert into Blood_Management values(1,"John",9867452207),(2,"Manoj",7721450011),
(3,"Radhika",8132321072),(4,"Prasad",7890240018);
Query OK, 4 rows affected (0.007 sec)
Records: 4  Duplicates: 0  Warnings: 0

MariaDB [project]> select * from Blood_Management;
+------+---------+-------------+
| m_id | m_name  | m_contact_no |
+------+---------+-------------+
|    1 | John    | 9867452207   |
|    2 | Manoj   | 7721450011   |
|    3 | Radhika | 8132321072   |
|    4 | Prasad  | 7890240018   |
+------+---------+-------------+
4 rows in set (0.001 sec)
```

Hospital_info Table

```
MariaDB [project]> create table Hospital_info(Hos_id int primary key, Hos_name varchar(30), City varchar(20),
Hos_needed_Bloodgp varchar(10), Hos_needed_quantity int, m_id int, foreign key(m_id) references
Blood_Management(m_id));
Query OK, 0 rows affected (0.017 sec)
```

```
MariaDB [project]> insert into hospital_info values(1, "City Hospital","Mumbai","B+",8,1),(2, "Apple
Hospital","Chinchvad","O+",20,4),(3,"Parulekar Hospital","Thane","A+",7,2),(4,"Lifeline
Hospital","Pune","AB+",12,4),(5,"Sanjivani Hospital","Vashi","AB+",17,3),(6,"MGM Hospital","Panvel","B+",9,3),
(7,"Unicare Hospital","Mulund","0-",2,2),(8,"Medicare Hospital","Airoli","A+",10,3),(9,"Phoenix
Hospital","Kurla","B+",14,1),(10,"Heritage Hospital","Ghatkopar","B+",9,1),(11, "Criticare
Hospital","Mumbai","A+",10,1),(12, "D.Y.Patil Hospital", "Vashi","O+",5,3),(13, "Hiranandini
Hospital","Pune","AB+",4,4),(14,"Indravati Hospital","Mulund","A-",2,2),(15,"Jijamata Hospital","Panvel","B-
",3,3;
Query OK, 15 rows affected (0.012 sec)
Records: 15 Duplicates: 0  Warnings: 0

MariaDB [project]> select * from hospital_info;
+--------+----------------------+-----------+--------------------+----------------------+------+
| Hos_id | Hos_name             | City      | Hos_needed_Bloodgp | Hos_needed_quantity | m_id |
+--------+----------------------+-----------+--------------------+----------------------+------+
|      1 | City Hospital        | Mumbai    | B+                 |                    8 |    1 |
|      2 | Apple Hospital       | Chinchvad | O+                 |                   20 |    4 |
|      3 | Parulekar Hospital   | Thane     | A+                 |                    7 |    2 |
|      4 | Lifeline Hospital    | Pune      | AB+                |                   12 |    4 |
|      5 | Sanjivani Hospital   | Vashi     | AB+                |                   17 |    3 |
|      6 | MGM Hospital         | Panvel    | B+                 |                    9 |    3 |
|      7 | Unicare Hospital     | Mulund    | 0-                 |                    2 |    2 |
|      8 | Medicare Hospital    | Airoli    | A+                 |                   10 |    3 |
|      9 | Phoenix Hospital     | Kurla     | B+                 |                   14 |    1 |
|     10 | Heritage Hospital    | Ghatkopar | B+                 |                    9 |    1 |
|     11 | Criticare Hospital   | Mumbai    | A+                 |                   10 |    1 |
|     12 | D.Y.Patil Hospital   | Vashi     | O+                 |                    5 |    3 |
|     13 | Hiranandini Hospital | Pune      | AB+                |                    4 |    4 |
|     14 | Indravati Hospital   | Mulund    | A-                 |                    2 |    2 |
|     15 | Jijamata Hospital    | Panvel    | B-                 |                    3 |    3 |
+--------+----------------------+-----------+--------------------+----------------------+------+
15 rows in set (0.000 sec)
```

Blood_Donor Table

```
MariaDB [project]> create table Blood_Donor(bd_id int primary key, bd_name varchar(15), bd_age int, bd_gender
enum("M","F"), bd_Bloodgp varchar(10), bd_reg_date date, City varchar(20),m_id int, foreign key(m_id)
references Blood_Management(m_id));
Query OK, 0 rows affected (0.018 sec)
```

```
ariaDB [project]> insert into blood_donor values(1,"Mark",25,"M","B+","2021-06-22","Pune",4),
(2,"Abdul",35,"M","A+","2022-05-12","Mumbai",1),(3,"Smith",22,"M","O+","2022-08-25","Kurla",1),
(4,"Priya",21,"F","AB+","2021-01-01","Chinchvad",4),(5,"Shruti",23,"F","O+","2021-12-21","Airoli",3),
(6,"Ram",25,"M","B+","2021-02-06","Panvel",3),(7,"Keya",21,"F","AB+","2022-06-12","Thane",2),
(8,"Mayank",32,"M","O-","2021-09-10","Mulund",2),(9,"Rahul",38,"M","A+","2021-10-15","Mumbai",1),
(10,"Shweta",23,"F","B+","2022-02-02","Airoli",3),(12,"Prachi",18,"F","A-","2022-06-07","Ghatkopar",1),
(13,"Prathm",30,"M","B-","2021-09-10","Pune",4),(14,"Alokh",26,"M","AB+","2021-12-02","Airoli",3),
(15,"Mayuri",32,"F","O+","2022-05-12","Thane",2);
Query OK, 15 rows affected (0.010 sec)
Records: 15  Duplicates: 0  Warnings: 0


MariaDB [project]> select * from blood_donor;
+-------+---------+--------+-----------+------------+-------------+-----------+------+
| bd_id | bd_name | bd_age | bd_gender | bd_Bloodgp | bd_reg_date | City      | m_id |
+-------+---------+--------+-----------+------------+-------------+-----------+------+
|     1 | Mark    |     25 | M         | B+         | 2021-06-22  | Pune      |    4 |
|     2 | Abdul   |     35 | M         | A+         | 2022-05-12  | Mumbai    |    1 |
|     3 | Smith   |     22 | M         | O+         | 2022-08-25  | Kurla     |    1 |
|     4 | Priya   |     21 | F         | AB+        | 2021-01-01  | Chinchvad |    4 |
|     5 | Shruti  |     23 | F         | O+         | 2021-12-21  | Airoli    |    3 |
|     6 | Ram     |     25 | M         | B+         | 2021-02-06  | Panvel    |    3 |
|     7 | Keya    |     21 | F         | AB+        | 2022-06-12  | Thane     |    2 |
|     8 | Mayank  |     32 | M         | O-         | 2021-09-10  | Mulund    |    2 |
|     9 | Rahul   |     38 | M         | A+         | 2021-10-15  | Mumbai    |    1 |
|    10 | Shweta  |     23 | F         | B+         | 2022-02-02  | Airoli    |    3 |
|    11 | Sumit   |     34 | M         | A+         | 2021-12-12  | Pune      |    4 |
|    12 | Prachi  |     18 | F         | A-         | 2022-06-07  | Ghatkopar |    1 |
|    13 | Prathm  |     30 | M         | B-         | 2021-09-10  | Pune      |    4 |
|    14 | Alokh   |     26 | M         | AB+        | 2021-12-02  | Airoli    |    3 |
|    15 | Mayuri  |     32 | F         | O+         | 2022-05-12  | Thane     |    2 |
+-------+---------+--------+-----------+------------+-------------+-----------+------+
15 rows in set (0.000 sec)
```

Blood_Receiver Table

```
MariaDB [project]> create table Blood_Receiver(rec_id int primary key,rec_name varchar(20), rec_age
int,rec_gender enum("M","F"),rec_Bloodgp varchar(10),rec_reg_date date, City varchar(20), rec_Blood_quantity
int,m_id int, foreign key(m_id) references Blood_Management(m_id));
```

```
Query OK, 0 rows affected (0.018 sec)


MariaDB [project]> insert into blood_receiver values(1, "Swati",23,"F","B+","2022-02-04","Mumbai",1,1),
(2,"Sham",50,"M","A+","2021-12-25","Airoli",1,3),(3,"Riya",29,"F","AB+","2021-05-17","Mulund",2,2),
(4,"Sakshi",32,"F","O-","2022-02-16","Pune",1,4),(5,"Ozas",21,"M","O+","2022-04-03","Kurla",2,1),
(6,"Sahil",45,"M","A+","2021-11-07","Panvel",1,3),(7,"Arohi",34,"F","B+","2022-05-24","Thane",2,1),
(8,"Rohit",56,"M","AB+","2021-10-17","Chinchvad",1,4),(9,"Kajal",30,"F","B+","202-06-20","Pune",1,4),
(10,"Pranjal",15,"F","A+","2022-06-17","Vashi",1,3),(11,"Pravin",54,"M","A-","2021-02-16","Ghatkopar",1,1),
(12,"Shreya",25,"F","B-","2022-06-21","Chinchvad",2,4),(13,"Vishal",42,"M","O+","2022-01-23","Panvel",1,3),
(14,"Shubham", 16,"M","AB+","2021-08-28","Thane",2,2),(15,"Snehal",18,"F","O-","2021-12-12","Kurla",1,1);
Query OK, 15 rows affected (0.010 sec)
Records: 15  Duplicates: 0  Warnings: 0


MariaDB [project]> select * from blood_receiver;
+--------+----------+---------+------------+-------------+--------------+----------+--------------------+----
--+
| rec_id | rec_name | rec_age | rec_gender | rec_Bloodgp | rec_reg_date | City     | rec_Blood_quantity |
m_id |
+--------+----------+---------+------------+-------------+--------------+----------+--------------------+----
--+
|      1 | Swati    |      23 | F          | B+          | 2022-02-04   | Mumbai   |                  1 |
1 |
|      2 | Sham     |      50 | M          | A+          | 2021-12-25   | Airoli   |                  1 |
3 |
|      3 | Riya     |      29 | F          | AB+         | 2021-05-17   | Mulund   |                  2 |
2 |
|      4 | Sakshi   |      32 | F          | O-          | 2022-02-16   | Pune     |                  1 |
4 |
|      5 | Ozas     |      21 | M          | O+          | 2022-04-03   | Kurla    |                  2 |
1 |
|      6 | Sahil    |      45 | M          | A+          | 2021-11-07   | Panvel   |                  1 |
3 |
|      7 | Arohi    |      34 | F          | B+          | 2022-05-24   | Thane    |                  2 |
1 |
|      8 | Rohit    |      56 | M          | AB+         | 2021-10-17   | Chinchvad |                  1 |
4 |
|      9 | Kajal    |      30 | F          | B+          | 2022-06-20   | Pune     |                  1 |
4 |
|     10 | Pranjal  |      15 | F          | A+          | 2022-06-17   | Vashi    |                  1 |
3 |
```

```
|     11 | Pravin   |      54 | M          | A-          | 2021-02-16   | Ghatkopar |                   1 |
1 |
|     12 | Shreya   |      25 | F          | B-          | 2022-06-21   | Chinchvad |                   2 |
4 |
|     13 | Vishal   |      42 | M          | O+          | 2022-01-23   | Panvel    |                   1 |
3 |
|     14 | Shubham  |      16 | M          | AB+         | 2021-08-28   | Thane     |                   2 |
2 |
|     15 | Snehal   |      18 | F          | O-          | 2021-12-12   | Kurla     |                   1 |
1 |
+--------+----------+---------+------------+-------------+--------------+-----------+---------------------+----
--+
15 rows in set (0.011 sec)
```

Simple view : needed_blood

```
MariaDB [project]> select * from needed_blood;
+----------------------+--------------------+----------------------+
| Hos_name             | Hos_needed_Bloodgp | Hos_needed_quantity |
+----------------------+--------------------+----------------------+
| City Hospital        | B+                 |                    8 |
| Apple Hospital       | O+                 |                   20 |
| Parulekar Hospital   | A+                 |                    7 |
| Lifeline Hospital    | AB+                |                   12 |
| Sanjivani Hospital   | AB+                |                   17 |
| MGM Hospital         | B+                 |                    9 |
| Unicare Hospital     | 0-                 |                    2 |
| Medicare Hospital    | A+                 |                   10 |
| Phoenix Hospital     | B+                 |                   14 |
| Heritage Hospital    | B+                 |                    9 |
| Criticare Hospital   | A+                 |                   10 |
| D.Y.Patil Hospital   | O+                 |                    5 |
| Hiranandini Hospital | AB+                |                    4 |
| Indravati Hospital   | A-                 |                    2 |
| Jijamata Hospital    | B-                 |                    3 |
+----------------------+--------------------+----------------------+
15 rows in set (0.005 sec)
```

Complex View: blood_info

Complex View: blood_info

```
MariaDB [project]> select * from blood_info;
+---------------------+------+----------+-------------+
| Hos_name            | m_id | rec_name | rec_Bloodgp |
+---------------------+------+----------+-------------+
| City Hospital       |    1 | Swati    | B+          |
| City Hospital       |    1 | Ozas     | O+          |
| City Hospital       |    1 | Arohi    | B+          |
| City Hospital       |    1 | Pravin   | A-          |
| City Hospital       |    1 | Snehal   | O-          |
| Apple Hospital      |    4 | Sakshi   | O-          |
| Apple Hospital      |    4 | Rohit    | AB+         |
| Apple Hospital      |    4 | Kajal    | B+          |
| Apple Hospital      |    4 | Shreya   | B-          |
| Parulekar Hospital  |    2 | Riya     | AB+         |
| Parulekar Hospital  |    2 | Shubham  | AB+         |
| Lifeline Hospital   |    4 | Sakshi   | O-          |
| Lifeline Hospital   |    4 | Rohit    | AB+         |
| Lifeline Hospital   |    4 | Kajal    | B+          |
| Lifeline Hospital   |    4 | Shreya   | B-          |
| Sanjivani Hospital  |    3 | Sham     | A+          |
| Sanjivani Hospital  |    3 | Sahil    | A+          |
| Sanjivani Hospital  |    3 | Pranjal  | A+          |
| Sanjivani Hospital  |    3 | Vishal   | O+          |
| MGM Hospital        |    3 | Sham     | A+          |
| MGM Hospital        |    3 | Sahil    | A+          |
| MGM Hospital        |    3 | Pranjal  | A+          |
| MGM Hospital        |    3 | Vishal   | O+          |
| Unicare Hospital    |    2 | Riya     | AB+         |
| Unicare Hospital    |    2 | Shubham  | AB+         |
| Medicare Hospital   |    3 | Sham     | A+          |
| Medicare Hospital   |    3 | Sahil    | A+          |
| Medicare Hospital   |    3 | Pranjal  | A+          |
| Medicare Hospital   |    3 | Vishal   | O+          |
| Phoenix Hospital    |    1 | Swati    | B+          |
| Phoenix Hospital    |    1 | Ozas     | O+          |
| Phoenix Hospital    |    1 | Arohi    | B+          |
| Phoenix Hospital    |    1 | Pravin   | A-          |
| Phoenix Hospital    |    1 | Snehal   | O-          |
| Heritage Hospital   |    1 | Swati    | B+          |
| Heritage Hospital   |    1 | Ozas     | O+          |
| Heritage Hospital   |    1 | Arohi    | B+          |
| Heritage Hospital   |    1 | Pravin   | A-          |
```

```
| Heritage Hospital    |    1 | Snehal   | O-          |
| Criticare Hospital   |    1 | Swati    | B+          |
| Criticare Hospital   |    1 | Ozas     | O+          |
| Criticare Hospital   |    1 | Arohi    | B+          |
| Criticare Hospital   |    1 | Pravin   | A-          |
| Criticare Hospital   |    1 | Snehal   | O-          |
| D.Y.Patil Hospital   |    3 | Sham     | A+          |
| D.Y.Patil Hospital   |    3 | Sahil    | A+          |
| D.Y.Patil Hospital   |    3 | Pranjal  | A+          |
| D.Y.Patil Hospital   |    3 | Vishal   | O+          |
| Hiranandini Hospital |    4 | Sakshi   | O-          |
| Hiranandini Hospital |    4 | Rohit    | AB+         |
| Hiranandini Hospital |    4 | Kajal    | B+          |
| Hiranandini Hospital |    4 | Shreya   | B-          |
| Indravati Hospital   |    2 | Riya     | AB+         |
| Indravati Hospital   |    2 | Shubham  | AB+         |
| Jijamata Hospital    |    3 | Sham     | A+          |
| Jijamata Hospital    |    3 | Sahil    | A+          |
| Jijamata Hospital    |    3 | Pranjal  | A+          |
| Jijamata Hospital    |    3 | Vishal   | O+          |
+----------------------+------+----------+-------------+
58 rows in set (0.008 sec)
```

Create view receiver and donor names having the same blood group

```
MariaDB [project]> create view Blood_Donor_receiver_samegroup1 as select distinct blood_donor.bd_name,
blood_receiver.rec_name , rec_bloodgp from hospital_info inner join blood_donor on hospital_info.m_id =
blood_donor.m_id
    -> inner join blood_receiver on  hospital_info.m_id=blood_receiver.m_id
    -> where blood_donor.bd_Bloodgp=blood_receiver. rec_Bloodgp;
Query OK, 0 rows affected (0.006 sec)

MariaDB [project]> select * from Blood_Donor_receiver_samegroup1 ;
+---------+----------+-------------+
| bd_name | rec_name | rec_bloodgp |
+---------+----------+-------------+
| Mark    | Kajal    | B+          |
| Smith   | Ozas     | O+          |
| Priya   | Rohit    | AB+         |
| Shruti  | Vishal   | O+          |
| Keya    | Riya     | AB+         |
```

```
| Keya    | Shubham  | AB+         |
| Prachi  | Pravin   | A-          |
| Prathm  | Shreya   | B-          |
+---------+----------+-------------+
8 rows in set (0.002 sec)
```

Show the donors having the same blood group required by the receiver staying in the same city along with receiver details

```
MariaDB [project]> select blood_donor.bd_id, blood_donor.bd_name, blood_receiver.rec_id,
blood_receiver.rec_name, blood_receiver.rec_bloodgp  as blood_group,blood_donor.city from blood_donor,
blood_receiver
    -> where bd_bloodgp=rec_bloodgp and blood_donor.city=blood_receiver.city;
+-------+---------+--------+----------+-------------+-----------+
| bd_id | bd_name | rec_id | rec_name | blood_group | city      |
+-------+---------+--------+----------+-------------+-----------+
|     3 | Smith   |      5 | Ozas     | O+          | Kurla     |
|     4 | Priya   |      8 | Rohit    | AB+         | Chinchvad |
|     1 | Mark    |      9 | Kajal    | B+          | Pune      |
|    12 | Prachi  |     11 | Pravin   | A-          | Ghatkopar |
|     7 | Keya    |     14 | Shubham  | AB+         | Thane     |
+-------+---------+--------+----------+-------------+-----------+
5 rows in set (0.001 sec)
```

Display the information of hospital_info handled by blood_management whose id is 1.

```
MariaDB [project]> select hospital_info.hos_id, hospital_info.hos_name, hospital_info.city,
blood_management.m_id, blood_management.m_name from hospital_info,blood_management
    -> where blood_management.m_id=hospital_info.m_id and blood_management.m_id=1;
+--------+--------------------+-----------+------+--------+
| hos_id | hos_name           | city      | m_id | m_name |
+--------+--------------------+-----------+------+--------+
|      1 | City Hospital      | Mumbai    |    1 | John   |
|      9 | Phoenix Hospital   | Kurla     |    1 | John   |
|     10 | Heritage Hospital  | Ghatkopar |    1 | John   |
|     11 | Criticare Hospital | Mumbai    |    1 | John   |
+--------+--------------------+-----------+------+--------+
```

Display the previous year information of blood_donor in ascending order

```
MariaDB [project]> select * from blood_donor where year(bd_reg_date)="2021" order by bd_reg_date;
+-------+---------+--------+-----------+------------+-------------+-----------+------+
| bd_id | bd_name | bd_age | bd_gender | bd_Bloodgp | bd_reg_date | City      | m_id |
+-------+---------+--------+-----------+------------+-------------+-----------+------+
|     4 | Priya   |     21 | F         | AB+        | 2021-01-01  | Chinchvad |    4 |
|     6 | Ram     |     25 | M         | B+         | 2021-02-06  | Panvel    |    3 |
|     1 | Mark    |     25 | M         | B+         | 2021-06-22  | Pune      |    4 |
|     8 | Mayank  |     32 | M         | O-         | 2021-09-10  | Mulund    |    2 |
|    13 | Prathm  |     30 | M         | B-         | 2021-09-10  | Pune      |    4 |
|     9 | Rahul   |     38 | M         | A+         | 2021-10-15  | Mumbai    |    1 |
|    14 | Alokh   |     26 | M         | AB+        | 2021-12-02  | Airoli    |    3 |
|    11 | Sumit   |     34 | M         | A+         | 2021-12-12  | Pune      |    4 |
|     5 | Shruti  |     23 | F         | O+         | 2021-12-21  | Airoli    |    3 |
+-------+---------+--------+-----------+------------+-------------+-----------+------+
9 rows in set (0.001 sec)
```

Display information of blood_receiver according to age group distribution

```
MariaDB [project]> select rec_name, rec_age, rec_gender,city,
    -> case
    -> when rec_age between 15 and 21 then "Teen"
    -> when rec_age between 22 and 32 then "Adult"
    -> else "Senior"
    -> end as Age_group
    -> from blood_receiver;
+----------+---------+------------+-----------+-----------+
| rec_name | rec_age | rec_gender | city      | Age_group |
+----------+---------+------------+-----------+-----------+
| Swati    |      23 | F          | Mumbai    | Adult     |
| Sham     |      50 | M          | Airoli    | Senior    |
| Riya     |      29 | F          | Mulund    | Adult     |
| Sakshi   |      32 | F          | Pune      | Adult     |
| Ozas     |      21 | M          | Kurla     | Teen      |
| Sahil    |      45 | M          | Panvel    | Senior    |
| Arohi    |      34 | F          | Thane     | Senior    |
| Rohit    |      56 | M          | Chinchvad | Senior    |
| Kajal    |      30 | F          | Pune      | Adult     |
```

```
| Pranjal  |      15 | F          | Vashi     | Teen      |
| Pravin   |      54 | M          | Ghatkopar | Senior    |
| Shreya   |      25 | F          | Chinchvad | Adult     |
| Vishal   |      42 | M          | Panvel    | Senior    |
| Shubham  |      16 | M          | Thane     | Teen      |
| Snehal   |      18 | F          | Kurla     | Teen      |
+----------+---------+------------+-----------+-----------+
15 rows in set (0.000 sec)
```