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Experiment No.	**8**
Aim	**Create view.**
Command	Creating View:

Creating View:

```
mysql> Create or replace view Donor_View as
    -> Select id, firstname, lastname, bloodgroup
    -> from Donor with check option;
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> Select * from Donor_View;
+-----+-----------+-----------+------------+
| id  | firstname | lastname  | bloodgroup |
+-----+-----------+-----------+------------+
| 101 | Sujal     | Dingankar | O+         |
| 102 | Shreeya   | Nemade    | A+         |
| 103 | Harsha    | Surwase   | B+         |
| 104 | Avi       | Patil     | AB+        |
| 105 | Shruti    | Bhuvad    | A+         |
| 106 | John      | Doe       | O+         |
| 107 | Jane      | Smith     | O+         |
| 108 | Mark      | Taylor    | O+         |
| 109 | Lucy      | Brown     | A+         |
| 110 | Manu      | Pandey    | AB+        |
| 111 | Rakesh    | Ramane    | B+         |
+-----+-----------+-----------+------------+
11 rows in set (0.00 sec)
```

Insert data into the view:

```
mysql> Insert into Donor_View values(112,'Kiran','Nemade','A+');
Query OK, 1 row affected (0.01 sec)

mysql> Select * from Donor_View;
+-----+-----------+-----------+------------+
| id  | firstname | lastname  | bloodgroup |
+-----+-----------+-----------+------------+
| 101 | Sujal     | Dingankar | O+         |
| 102 | Shreeya   | Nemade    | A+         |
| 103 | Harsha    | Surwase   | B+         |
| 104 | Avi       | Patil     | AB+        |
| 105 | Shruti    | Bhuvad    | A+         |
| 106 | John      | Doe       | O+         |
| 107 | Jane      | Smith     | O+         |
| 108 | Mark      | Taylor    | O+         |
| 109 | Lucy      | Brown     | A+         |
| 110 | Manu      | Pandey    | AB+        |
| 111 | Rakesh    | Ramane    | B+         |
| 112 | Kiran     | Nemade    | A+         |
+-----+-----------+-----------+------------+
12 rows in set (0.00 sec)
```

```
mysql> Select * from Donor;
+-----+-----------+-----------+------------+-------------------------------+------------+------+--------------+
| id  | firstname | lastname  | contact    | email                         | bloodgroup | Age  | healthstatus |
+-----+-----------+-----------+------------+-------------------------------+------------+------+--------------+
| 101 | Sujal     | Dingankar | 7798802841 | sujal.dingankar@spit.ac.in    | O+         |   20 | Healthy      |
| 102 | Shreeya   | Nemade    | 7698231082 | shreeya.nemade@spit.ac.in     | A+         |   19 | Healthy      |
| 103 | Harsha    | Surwase   | 5612798561 | harsha.surwase@spit.ac.in     | B+         |   21 | Healthy      |
| 104 | Avi       | Patil     | 1234598745 | avinash.patil@spit.ac.in      | AB+        |   18 | Healthy      |
| 105 | Shruti    | Bhuvad    | 455612345  | shruti.bhuvad@spit.ac.in      | A+         |   22 | Healthy      |
| 106 | John      | Doe       | 7894561230 | john.doe@example.com          | O+         |   25 | Healthy      |
| 107 | Jane      | Smith     | 7894567890 | jane.smith@example.com        | O+         |   30 | Healthy      |
| 108 | Mark      | Taylor    | 7894563456 | mark.taylor@example.com       | O+         |   19 | Healthy      |
| 109 | Lucy      | Brown     | 7894569876 | lucy.brown@example.com        | A+         |   35 | Healthy      |
| 110 | Manu      | Pandey    | 4561298742 | manu.pandey@spit.ac.in        | AB+        |   26 | Healthy      |
| 111 | Rakesh    | Ramane    | 4531022236 | rakesh.ramane@spit.ac.in      | B+         |   40 | Healthy      |
| 112 | Kiran     | Nemade    | NULL       | NULL                          | A+         | NULL | NULL         |
+-----+-----------+-----------+------------+-------------------------------+------------+------+--------------+
12 rows in set (0.00 sec)
```

Data stored in view also reflected to the primary table.

Updated the data stored in the view:

```
mysql> Update Donor_view
    -> set Lastname = 'Artino'
    -> where id = 106;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1   Changed: 1   Warnings: 0

mysql> Select * from Donor_View;
+-----+-----------+-----------+------------+
| id  | firstname | lastname  | bloodgroup |
+-----+-----------+-----------+------------+
| 101 | Sujal     | Dingankar | O+         |
| 102 | Shreeya   | Nemade    | A+         |
| 103 | Harsha    | Surwase   | B+         |
| 104 | Avi       | Patil     | AB+        |
| 105 | Shruti    | Bhuvad    | A+         |
| 106 | John      | Artino    | O+         |
| 107 | Jane      | Smith     | O+         |
| 108 | Mark      | Taylor    | O+         |
| 109 | Lucy      | Brown     | A+         |
| 110 | Manu      | Pandey    | AB+        |
| 111 | Rakesh    | Ramane    | B+         |
| 112 | Kiran     | Nemade    | A+         |
+-----+-----------+-----------+------------+
12 rows in set (0.00 sec)
```

Deleted data from created view:

```
mysql> Delete from Donor_view where id = 112;
Query OK, 1 row affected (0.01 sec)

mysql> Select * from Donor_View;
+-----+-----------+-----------+------------+
| id  | firstname | lastname  | bloodgroup |
+-----+-----------+-----------+------------+
| 101 | Sujal     | Dingankar | O+         |
| 102 | Shreeya   | Nemade    | A+         |
| 103 | Harsha    | Surwase   | B+         |
| 104 | Avi       | Patil     | AB+        |
| 105 | Shruti    | Bhuvad    | A+         |
| 106 | John      | Artino    | O+         |
| 107 | Jane      | Smith     | O+         |
| 108 | Mark      | Taylor    | O+         |
| 109 | Lucy      | Brown     | A+         |
| 110 | Manu      | Pandey    | AB+        |
| 111 | Rakesh    | Ramane    | B+         |
+-----+-----------+-----------+------------+
11 rows in set (0.00 sec)
```

Create view using multiple tables:

```
mysql> Create or replace view Donor_Donne_View as
    -> select a.id AS Donor_Id, a.firstname AS Donor_Firstname, a.lastname AS Donor_Lastname,a.bloodgroup AS Donor_Bloodgroup, b.id AS Donne_Id, b.first
name AS Donne_Firstname, b.lastname AS Donne_Lastname, b.bloodgroup AS Donne
_bloodgroup
    -> from Donor a join Donne b on a.firstname = b.firstname
    -> with check option;
Query OK, 0 rows affected (0.01 sec)

mysql> select * from Donor_Donne_View;
+----------+-----------------+----------------+-------------------+----------+-----------------+----------------+-----------------+
| Donor_Id | Donor_Firstname | Donor_Lastname | Donor_Bloodgroup  | Donne_Id | Donne_Firstname | Donne_Lastname | Donne_bloodgroup |
+----------+-----------------+----------------+-------------------+----------+-----------------+----------------+-----------------+
|      105 | Shruti          | Bhuvad         | A+                |      105 | Shruti          | Bhuvad         | O+               |
+----------+-----------------+----------------+-------------------+----------+-----------------+----------------+-----------------+
1 row in set (0.00 sec)
```

In the Multiple table based view we can not perform insert , update and delete but the changes were done in base table is reflected.

Inserting data in base table.

1. Insert into Donor Table:

```
mysql> INSERT INTO Donor (id, firstname, lastname, contact, email, bloodgroup, Age, healthstatus)
    -> VALUES (112, 'Alice', 'Johnson', '1234567890', 'alice.johnson@example.com', 'A+', 30, 'Healthy');
Query OK, 1 row affected (0.01 sec)

mysql> Select * from Donor;
+-----+-----------+-----------+------------+-----------------------------+------------+-----+--------------+
| id  | firstname | lastname  | contact    | email                       | bloodgroup | Age | healthstatus |
+-----+-----------+-----------+------------+-----------------------------+------------+-----+--------------+
| 101 | Sujal     | Dingankar | 7798802841 | sujal.dingankar@spit.ac.in  | O+         |  20 | Healthy      |
| 102 | Shreeya   | Nemade    | 7698231082 | shreeya.nemade@spit.ac.in   | A+         |  19 | Healthy      |
| 103 | Harsha    | Surwase   | 5612798561 | harsha.surwase@spit.ac.in   | B+         |  21 | Healthy      |
| 104 | Avi       | Patil     | 1234598745 | avinash.patil@spit.ac.in    | AB+        |  18 | Healthy      |
| 105 | Shruti    | Bhuvad    | 455612345  | shruti.bhuvad@spit.ac.in    | A+         |  22 | Healthy      |
| 106 | John      | Artino    | 7894561230 | john.doe@example.com        | O+         |  25 | Healthy      |
| 107 | Jane      | Smith     | 7894567890 | jane.smith@example.com      | O+         |  30 | Healthy      |
| 108 | Mark      | Taylor    | 7894563456 | mark.taylor@example.com     | O+         |  19 | Healthy      |
| 109 | Lucy      | Brown     | 7894569876 | lucy.brown@example.com      | A+         |  35 | Healthy      |
| 110 | Manu      | Pandey    | 4561298742 | manu.pandey@spit.ac.in      | AB+        |  26 | Healthy      |
| 111 | Rakesh    | Ramane    | 4531022236 | rakesh.ramane@spit.ac.in    | B+         |  40 | Healthy      |
| 112 | Alice     | Johnson   | 1234567890 | alice.johnson@example.com   | A+         |  30 | Healthy      |
+-----+-----------+-----------+------------+-----------------------------+------------+-----+--------------+
12 rows in set (0.00 sec)
```

2. Insert into Donne Table:

```
mysql> INSERT INTO Donne (id, firstname, lastname, bloodgroup)
    -> VALUES (112, 'Alice', 'Williams', 'O+');
Query OK, 1 row affected (0.01 sec)

mysql> Select * from Donne;
+-----+------------+----------+------------+------------------------------+------------+--------------+------------+--------------+
| id  | firstname  | lastname | contact    | email                        | bloodgroup | healthstatus | request_id | request_date |
+-----+------------+----------+------------+------------------------------+------------+--------------+------------+--------------+
| 101 | Shubham    | Bhuvad   | 7798521123 | shubham.bhuvad@spit.ac.in    | A+         | Healthy      | R001       | 2024-10-05   |
| 102 | Sanjay     | Kadam    | 4568912345 | sanjay.bhuvad@spit.ac.in     | AB+        | Healthy      | R002       | 2024-10-06   |
| 103 | Harshvardan| Nemade   | 777894561  | harshavardan.nemade@spit.ac.in | O+       | Healthy      | R003       | 2024-10-14   |
| 104 | Soham      | Bhojane  | 564781234  | soham.bhojane@spit.ac.in     | A+         | Healthy      | R004       | 2024-10-20   |
| 105 | Shruti     | Bhuvad   | 7798802841 | sujal.dingankar@spit.ac.in   | O+         | Healthy      | R005       | 2024-10-25   |
| 112 | Alice      | Williams | NULL       | NULL                         | O+         | NULL         | NULL       | NULL         |
+-----+------------+----------+------------+------------------------------+------------+--------------+------------+--------------+
6 rows in set (0.00 sec)
```

3. After inserting records in both tables, you can confirm that the data reflects correctly in the Donor_Donne_View view:

```
mysql> select * from Donor_Donne_View;
+----------+-----------------+----------------+-------------------+----------+-----------------+----------------+-----------------+
| Donor_Id | Donor_Firstname | Donor_Lastname | Donor_Bloodgroup  | Donne_Id | Donne_Firstname | Donne_Lastname | Donne_bloodgroup |
+----------+-----------------+----------------+-------------------+----------+-----------------+----------------+-----------------+
|      105 | Shruti          | Bhuvad         | A+                |      105 | Shruti          | Bhuvad         | O+               |
|      112 | Alice           | Johnson        | A+                |      112 | Alice           | Williams       | O+               |
+----------+-----------------+----------------+-------------------+----------+-----------------+----------------+-----------------+
2 rows in set (0.00 sec)
```

Conclusion	From this experiment, I have learned about creating view and perform operations on it in MySQL & also implemented them.