DBMS Lab Quiz

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Roll – 57

Section - H

1) List the names of the Technical Analysts and total numbers of blood units processed by them in the ascending order of the number of blood units processed

```
mysql> SELECT ta_name, ta_surname, COUNT(bu_id) AS units FROM technical_anal
yst NATURAL JOIN technical_analyst_blood GROUP BY ta_id ORDER BY units;
+-----------+------------+-------+
| ta_name   | ta_surname | units |
+-----------+------------+-------+
| Dev       | Mustaine   |     1 |
| Varshini  | Friedman   |     1 |
| Vaidehi   | Rogan      |     2 |
| Varun     | Vai        |     2 |
| Sanjeeth  | Gilbert    |     2 |
| Sathish   | Petrucci   |     2 |
+-----------+------------+-------+
6 rows in set (0.00 sec)
```

2) Write a query to display the number of donors and the number of requests for particular blood groups in the descending order of requests

```
mysql> SELECT * FROM (SELECT blood_group, COUNT(request_id) AS num_requests
FROM requests GROUP BY blood_group) t1 NATURAL JOIN (SELECT blood_group, COU
NT(d_id) AS num_donors FROM donor GROUP BY blood_group) t2 ORDER BY num_requ
ests DESC;
+-------------+--------------+-------------+
| blood_group | num_requests | num_donors |
+-------------+--------------+-------------+
| O+          |            5 |           3 |
| AB+         |            4 |           4 |
| A+          |            2 |           2 |
| A-          |            2 |           2 |
| AB-         |            2 |           1 |
| O-          |            2 |           1 |
| B-          |            1 |           1 |
+-------------+--------------+-------------+
7 rows in set (0.00 sec)
```

3) Write a trigger to prevent the addition of a new Blood Bank in the localities where a blood bank already exists as it requires 'statutory permission'

```
mysql> DELIMITER $$
mysql> CREATE TRIGGER prevent_addition
    ->     BEFORE INSERT ON blood_bank
    ->     FOR EACH ROW
    -> BEGIN
    ->   IF NEW.bb_locality IN (SELECT bb_locality FROM blood_bank) THEN
    ->     SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = 'New blood bank requires statutory permission';
    ->   END IF;
    -> END; $$
Query OK, 0 rows affected (0.01 sec)

mysql> DELIMITER ;
mysql> INSERT INTO blood_bank VALUES (1004, 'Manipal Blood Bank', 'Suranjandas Road', 69, 'North Bangalore');
ERROR 1644 (45000): New blood bank requires statutory permission
mysql> INSERT INTO blood_bank VALUES (1004, 'Manipal Blood Bank', 'Suranjandas Road', 69, 'West Bangalore');
Query OK, 1 row affected (0.00 sec)

mysql> SELECT * FROM blood_bank;
+-------+---------------------+------------------+----------------+------------------+
| bb_id | bb_name             | bb_street        | bb_building_no | bb_locality      |
+-------+---------------------+------------------+----------------+------------------+
|  1000 | Red Cross Blood Bank | MG Road          |            121 | Central Bangalore |
|  1001 | Rotary Blood Bank    | Brigade Road     |            201 | North Bangalore  |
|  1002 | Lion's Blood Bank    | Turahalli Road   |            324 | South Bangalore  |
|  1003 | Minerva Blood Bank   | ECC Road         |            444 | East Banagalore  |
|  1004 | Manipal Blood Bank   | Suranjandas Road |             69 | West Bangalore   |
+-------+---------------------+------------------+----------------+------------------+
5 rows in set (0.00 sec)
```