Name	Sujal Sandeep Dingankar, Harsha Tanaji Surwase							
UID	2024301005, 2024301033							
Experiment No.	7							
Aim	TCL, DCL And Authentications.							
DCL	Created a User Sujal:							
Command	mysql> create user 'Sujal' identified by 'Sujal@2005'; Query OK, 0 rows affected (0.01 sec) Grant and Revoke Access From User:							
	mysql> GRANT ALL privileges on Donne to 'Sujal'; Query OK, 0 rows affected (0.01 sec)							
	mysql> flush Privileges; Query OK, 0 rows affected (0.01 sec)							
	mysql> grant insert, select on Donor to 'Sujal'; Query OK, 0 rows affected (0.01 sec)							

Login:

```
C:\Users\Sujal Dingankar>mysql -u Sujal -p
Enter password: ********
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 16
Server version: 8.0.39 MySQL Community Server - GPL

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

Performing queries with created user:

mysql> Select * from Donor;										
id	firstname	lastname	contact	email	bloodgroup	Age	healthstatus			
101	Sujal	Dingankar	7798802841	sujal.dingankar@spit.ac.in	0+	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	0+	25	Healthy			
107	Jane	Smith	7894567890	jane.smith@example.com	0+	30	Healthy			
108	Mark	Taylor	7894563456	mark.taylor@example.com	0+	19	Healthy			
109	Lucy	Brown	7894569876	lucy.brown@example.com	A+	35	Healthy			
9 rows	in set (0.00	+ 0 sec)	+		+	+				

mysql> Insert into Donor values(110,"Manu","Pandey","4561298742","manu.pandey@spit.ac.in","AB+",26,"Healthy"); Query OK, 1 row affected (0.01 sec) mysql> Select * from Donor; | id | firstname | lastname | contact | bloodgroup | Age | healthstatus | | email Healthy Healthy Sujal Dingankar 7798802841 sujal.dingankar@spit.ac.in 7698231082 5612798561 1234598745 102 Shreeya Nemade shreeya.nemade@spit.ac.in 19 harsha.surwase@spit.ac.in avinash.patil@spit.ac.in shruti.bhuvad@spit.ac.in john.doe@example.com jane.smith@example.com 21 18 Healthy Healthy 103 Harsha Surwase Patil R+ 104 AB+ 22 25 30 19 Healthy Healthy Healthy 105 106 Shruti Bhuvad 455612345 7894561230 A+ 0+ Doe Smith John 107 7894567890 108 Mark Taylor 7894563456 mark.taylor@example.comlucy.brown@example.com 0+ Healthy Lucy 7894569876 Healthy 109 35 Brown 110 Manu Pandey 4561298742 manu.pandey@spit.ac.in AB+ Healthy 10 rows in set (0.00 sec)

mysql> delete from Donor where id = 110; ERROR 1142 (42000): DELETE command denied to user 'Sujal'@'localhost' for table 'donor'

Revoke the given access from user:

mysql> revoke insert, select on Donor from 'Sujal'; Query OK, 0 rows affected (0.01 sec)

TCL Command:

Starting Transaction.

mysql> Start Transaction; Query OK, 0 rows affected (0.00 sec) mysql> Select * from Donor; id | firstname | lastname l email bloodgroup | Age | healthstatus contact 7798802841 7698231082 Dingankar sujal.dingankar@spit.ac.in Healthy surjat dinganal@spit.ac.in shreeya.nemade@spit.ac.in harsha.surwase@spit.ac.in avinash.patil@spit.ac.in shruti.bhuvad@spit.ac.in Shreeya Harsha 19 21 Healthy Healthy 102 Nemade A+ 103 Surwase 5612798561 B+ 1234598745 455612345 104 Avi Patil AB+ Healthy 22 25 Healthy 105 Shruti A+ Bhuvad 106 John Doe 7894561230 john.doe@example.com Healthy Jane Mark Smith jane.smith@example.com mark.taylor@example.com lucy.brown@example.com 30 19 107 7894567890 Healthy 108 7894563456 0+ Taylor Healthy Lucy Brown 7894569876 Healthy 110 Manú Pandey 4561298742 manu.pandey@spit.ac.in AB+ Healthy 10 rows in set (0.00 sec)

Inserted data in the Donor table after transaction is started.

mysql> Insert into Donor values(111,'Rakesh','Ramane','4531022236','rakesh.ramane@spit.ac.in','B+',40,'Healthy'); Query OK, 1 row affected (0.00 sec)

mysql> Select * from Donor;

						+		+ -
į	id	firstname	lastname	contact	email	bloodgroup	Age	healthstatus
	101 102 103 104 105 106 107 108 109 110	Sujal Shreeya Harsha Avi Shruti John Jane Mark Lucy Manu Rakesh	Dingankar Nemade Surwase Patil Bhuvad Doe Smith Taylor Brown Pandey Ramane	7798802841 7698231082 5612798561 1234598745 455612345 7894561230 7894567890 7894563456 7894569876 4561298742 4531022236	sujal.dingankar@spit.ac.in shreeya.nemade@spit.ac.in harsha.surwase@spit.ac.in avinash.patil@spit.ac.in shruti.bhuvad@spit.ac.in john.doe@example.com jane.smith@example.com lucy.brown@example.com manu.pandey@spit.ac.in rakesh.ramane@spit.ac.in	0+ A+ B+ AB+ O+ O+ O+ AB+ B+	20 19 21 18 22 25 30 19 35 26 40	Healthy

11 rows in set (0.00 sec)

Rollback: mysql> Rollback; Query OK, 0 rows affected (0.01 sec) nvsal> Select * from Donor: email | firstname | lastname | contact bloodgroup | Age healthstatus 101 Sujal Dingankar 7798802841 sujal.dingankar@spit.ac.in Healthy 102 Shreeya 7698231082 shreeya.nemade@spit.ac.in Α+ 19 Healthy Nemade Healthy 103 Harsha Surwase 5612798561 harsha.surwase@spit.ac.in R+ 21 avinash.patil@spit.ac.in shruti.bhuvad@spit.ac.in Patil 1234598745 AB+ 18 104 Avi Healthy 22 25 30 105 Shruti Bhuvad 455612345 7894561230 A+ 0+ Healthy 106 Doe Smith john.doe@example.com jane.smith@example.com John. Healthy 107 7894567890 0+ Jane Healthy 108 Mark Taylor 7894563456 mark.taylor@example.com 0+ 19 Healthy lucy.brown@example.com manu.pandey@spit.ac.in 109 7894569876 Lucy Brown Δ+ 35 Healthy Pandey 110 Manu 4561298742 Healthy 10 rows in set (0.00 sec)

Commit:

```
mysql> Insert into Donor values(111,'Rakesh','Ramane','4531022236','rakesh.ramane@spit.ac.in','B+',40,'Healthy')
Query OK, 1 row affected (0.01 sec)
mysql> commit;
Query OK, 0 rows affected (0.00 sec)
 mvsal> Select * from Donor:
   id
        | firstname | lastname
                                            | contact
                                                                email
                                                                                                          bloodgroup | Age
                                                                                                                                       healthstatus |
           Sujal
Shreeya
Harsha
                                              7798802841
7698231082
                                                                                                                                       Healthy
                             Dingankar
                                                                 sujal.dingankar@spit.ac.in
                                                                                                                                20
19
21
18
22
25
30
19
35
   102
                             Nemade
                                                                 shreeya.nemade@spit.ac.in
harsha.surwase@spit.ac.in
                                                                                                                                       Healthy
Healthy
   103
104
105
                                              5612798561
                             Surwase
                                              1234598745
455612345
           Avi
Shruti
                                                                 avinash.patil@spit.ac.in
shruti.bhuvad@spit.ac.in
                                                                                                                                       Healthy
Healthy
                             Patil
                                                                                                           AB+
                             Bhuvad
   106
107
108
109
           John
Jane
                             Doe
Smith
                                              7894561230
7894567890
                                                                 john.doe@example.com
jane.smith@example.com
                                                                                                           0+
0+
                                                                                                                                       Healthy
Healthy
                                                                 mark.taylor@example.com
lucy.brown@example.com
           Mark
                             Taylor
                                              7894563456
                                                                                                                                        Healthy
                             Brown
Pandey
                                                                                                                                       Healthy
            Lucy
                                              7894569876
                                                                                                           A+
   110
111
                                              4561298742
                                                                 manu.pandey@spit.ac.in
                                                                                                           AB+
                                                                                                                                 26
                                                                 rakesh.ramane@spit.ac.in
                                                                                                                                       Healthy
           Rakesh
                             Ramane
                                              4531022236
                                                                                                                                40
11 rows in set (0.00 sec)
```

Savepoint:

mvsgl> Savepoint SP1:

```
Query OK, 0 rows affected (0.00 sec)
mysql> Insert into Donor values(112,'Rohit','Ramane','4531011112','rohit.ramane@spit.ac.in','B+',30,'Healthy');
Query OK, 1 row affected (0.00 sec)
mysql> Savepoint SP2;
Query OK, 0 rows affected (0.00 sec)
mysql> Insert into Donor values(113,'Rahul','Jha','2154611112','rahul.jha@spit.ac.in','AB+',28,'Healthy');
Query OK, 1 row affected (0.00 sec)
mysal> Select * from Donor:
                                                             email
                                                                                                                              | healthstatus
  id
        | firstname |
                           lastname
                                           contact
                                                                                                     bloodgroup | Age
                                            7798802841
                                                              sujal.dingankar@spit.ac.in
                           Dingankar
                                                                                                                                 Healthy
           Shreeya
                                                                                                                                 Healthy
Healthy
                                            7698231082
                                                             shreeya.nemade@spit.ac.in
harsha.surwase@spit.ac.in
                                                                                                     A+
                                                                                                                          19
   102
                           Nemade
   103
           Harsha
                           Surwase
                                            5612798561
                                                                                                     B+
                                                                                                                                 Healthy
Healthy
   104
           Avi
                           Patil
                                            1234598745
                                                             avinash.patil@spit.ac.in
shruti.bhuvad@spit.ac.in
                                                                                                     AB+
                                                                                                                          18
                                                                                                                          22
25
   105
                                                                                                     A+
           Shruti
                           Bhuvad
                                            455612345
                                                                                                     0+
0+
0+
  106
107
108
109
                                                              john.doe@example.com
jane.smith@example.com
                                                                                                                                 Healthy
Healthy
Healthy
                           Doe
Smith
                                           7894561230
7894567890
           John
           Jane
                                                                                                                          30
19
           Mark
                                            7894563456
                                                               ark.taylor@example.com
                           Taylor
                                                             lucy.brown@example.com
manu.pandey@spit.ac.in
           Lucy
Manu
                           Brown
Pandey
                                                                                                     A+
AB+
                                                                                                                                 Healthy
Healthy
                                            7894569876
                                                                                                                          35
   110
                                            4561298742
                                                                                                                          26
  111
112
                                                              rakesh.ramane@spit.ac.in
                                                                                                     B+
B+
                                                                                                                          40
30
                                                                                                                                 Healthy
Healthy
           Rakesh
                           Ramane
                                            4531022236
                                                             rohit.ramane@spit.ac.in
rahul.jha@spit.ac.in
                           Ramane
                                            4531011112
           Rohit
           Rahul
                           Jha
                                            2154611112
                                                                                                                                 Healthy
13 rows in set (0.00 sec)
```

Rollback to Savepoint: mysql> Rollback to savepoint SP2; Query OK, 0 rows affected (0.00 sec) mysql> Select * from Donor; firstname | email bloodgroup healthstatus id lastname | contact Aae sujal.dingankar@spit.ac.in shreeya.nemade@spit.ac.in harsha.surwase@spit.ac.in avinash.patil@spit.ac.in shruti.bhuvad@spit.ac.in 101 102 Sujal Shreeya Dingankar Nemade 7798802841 20 19 21 18 22 25 30 19 35 26 Healthy Healthy 7698231082 103 104 Healthy Healthy Healthy Surwase Patil 5612798561 1234598745 B+ AB+ Harshá Avi 105 Shruti Bhuvad 455612345 105 106 107 108 109 110 john.doe@example.com jane.smith@example.com mark.taylor@example.com 0+ Healthy Healthy Healthy John Jane Doe Smith 7894561230 7894567890 Mark Taylor 7894563456 0+ lucy.brown@example.com manu.pandey@spit.ac.in rakesh.ramane@spit.ac.in A+ AB+ Healthy Healthy Lucy Manu Brown Pandey 7894569876 4561298742 111 112 Rakesh Ramane 4531022236 40 Healthy Healthy 4531011112 rohit.ramane@spit.ac.in Rohit Ramane 12 rows in set (0.00 sec) mysql> Rollback to savepoint SP1; Query OK, 0 rows affected (0.00 sec) mysql> Select * from Donor; firstname | lastname | contact email bloodgroup | Age | healthstatus Healthy Healthy 7798802841 sujal.dingankar@spit.ac.in Dingankar Shreeya Nemade 7698231082 shreeya.nemade@spit.ac.in Healthy Healthy Healthy 103 104 Surwase Patil 5612798561 1234598745 harsha.surwase@spit.ac.in avinash.patil@spit.ac.in shruti.bhuvad@spit.ac.in 21 18 22 25 30 19 35 26 Harsha AB+ Avi 105 106 107 455612345 7894561230 7894567890 Shruti Bhuvad A+ 0+ Doe Smith john.doe@example.com jane.smith@example.com Healthy Healthy Healthy John Jane 0+ 107 108 109 Mark Taylor 7894563456 mark.taylor@example.com Lucy Manu Brown Pandey 7894569876 lucy.brown@example.com manu.pandey@spit.ac.in Α+ Healthy Healthy 110 4561298742 AB+ Rakesh Ramané 4531022236 rakesh.ramane@spit.ac.in Healthy in set (0.00 sec) From this experiment, I learnt different DCL & TCL commands in MySQL & also Conclusion implemented them.