**Q1. Create the tables for User, Circle, User\_Circle, Messages and User\_Inbox (to be created with help of Triggers)**

1. **Creating user table:**

create table user(

uid VARCHAR(20) PRIMARY KEY NOT NULL,

upass VARCHAR(20) NOT NULL,

name VARCHAR(30) NOT NULL);

1. **Create circle table using foreign key as of (1.):**

create table user\_circle(

crid VARCHAR(20) PRIMARY KEY NOT NULL,

uid VARCHAR(20) NOT NULL,

crname VARCHAR(20) NOT NULL,

created\_by VARCHAR(20) NOT NULL,

created\_on DATE NOT NULL,

FOREIGN KEY (uid) REFERENCES user(uid));

1. **Create message table:**

create table messages(

mid VARCHAR(20) PRIMARY KEY,

message VARCHAR(500),

msg\_from VARCHAR(20),

msg\_to VARCHAR(20));

1. **Create user\_inbox table:**

create table user\_inbox(

mid VARCHAR(20),

uid VARCHAR(20),

message VARCHAR(500),

msg\_from VARCHAR(20),

msg\_to VARCHAR(20),

FOREIGN KEY (mid) REFERENCES messages(mid),

FOREIGN KEY (uid) REFERENCES user(uid));

1. **Create subscribed\_details table:**

create table subscribed\_details(

crid VARCHAR(20),

uid VARCHAR(20),

crname VARCHAR(20),

FOREIGN KEY (crid) REFERENCES user\_circle(crid),

FOREIGN KEY (uid) REFERENCES user(uid));

Query to delete the foreign key in a table

alter table user\_circle

-> drop foreign key tablename\_ibfk\_1;

Then drop the column

alter table user\_circle

-> drop uid;

To add the foreign key constraint

alter table user\_circle

-> add foreign key(created\_by) references user(uid);

**Query to change table name:**

* Rename table ‘current\_table\_name’ to ‘new\_table\_name’

**Q2. Insert the rows into the created tables (User, Circle, User\_Circle, and Messages)**

**a). For user:**

mysql> select \* from user;

**b). For circle:**

mysql> select \* from circle;

**Trigger**

mysql> create trigger cdate before insert on circle

mysql> insert into circle value('CR03','Trip','U01','2018-01-01');

mysql> select \* from circle;

**c). user\_circle:**

**Trigger**

mysql> create trigger sid before insert

**d). Messages:**

**Trigger**

mysql> delimiter //

mysql> create trigger msg before insert on messages

mysql> insert into messages (mid,msg\_from, msg\_to) values('M09','U03','CR03');//

**Q3. Fetch the row from User table based on Id and Password.**

mysql> select \* from user where uid='U01' and upass='abc';

**Q4. Fetch all the rows from Circle table based on the field created\_by.**

mysql> select \* from circle where created\_by ='U01';

**Q5.** **Fetch all the Circles created after the particular Date.**

mysql> select crname from circle where created\_on > 2018-04-29;

**Q6. Fetch all the User Ids from UserCircle table subscribed to particular Circle.**

**mysql> select uid from user\_circle where crid = 'CR01';**

**Q8.**  **Fetch all the Messages from the Messages table sent by a particular User.**

mysql> select message from messages where msg\_from = 'U02';

**Q9. Fetch all the Messages from the Messages table received by a particular User**.

mysql> select message from messages where msg\_to = 'U01';

**Q10. Fetch all the Messages from the Messages table sent/received by a particular User. (both the Messages)**

mysql> select message from messages where msg\_from = 'U01' or msg\_to = 'U01';

**Q11. Write a query to send Message from particular User to another User(Use Message table - insert statement).**

mysql> select \* from messages;

mysql> insert into messages value('M07','Hi let go for walk','U01','U02');

**Q12. Write a query to send Message from particular User to particular Circle(Use Message table - insert statement)**

mysql> insert into messages value('M08','Alert Commando','U02','CR01');

mysql> select \* from messages;

**Q13. Write a query to delete particular Message which you received from User(User Inbox table - delete statement)**

mysql> select \* from messages

mysql> delete from messages where mid = 'M05' and msg\_from = 'U02'

**Q14. Write a query to delete particular Message which you received from particular Circle(User Inbox table - delete statement)**

mysql> delete from messages where msg\_to = 'CR01' and mid = 'M08'