

Date: 15/04/2024

Task

1. Create a table Customer with columns cid and cname. cid should be a primary key in the table and cname should be NOT NULL.

```
mysql> create table Customer (c_id int primary key,cname varchar(20) not null); Query OK, 0 rows affected (0.06 sec).
```

2. Insert three customer data into the table.

```
mysql> insert into customer (c_id,cname) values (01,'Ramesh'),(02,'Savitha'),(03,'Saritha');  
Query OK, 3 rows affected (0.02 sec)
```

Records: 3 Duplicates: 0 Warnings: 0

```
mysql> select * from customer;
```

```
+-----+-----+  
| c_id | cname |  
+-----+-----+  
| 01 | Ramesh |  
| 02 | Savitha |  
| 03 | Saritha |  
+-----+-----+
```

3 rows in set (0.00 sec)

3. Add columns age, city and phnum. Age > 20, city default value should be 'Bangalore' and phnum should be unique.

```
mysql> alter table customer add (age int check (age>20),city varchar(10) default ->  
'bangalore',phnum int unique);
```

Query OK, 3 rows affected (0.11 sec)

Records: 3 Duplicates: 0 Warnings: 0

```
mysql> desc customer;
```

```
+-----+-----+-----+-----+-----+-----+
```

Field	Type	Null	Key	Default	Extra
c_id	int	NO	PRI	NULL	
cname	varchar(20)	NO		NULL	
age	int	YES		NULL	
city	varchar(10)	YES		banglore	
phnum	int	YES	UNI	NULL	

5 rows in set (0.00 sec)

4. Turn on the transaction on.

```
mysql> set autocommit=0;
Query OK, 0 rows affected (0.01 sec)
```

5. Insert another two customer data into the table without city value.

```
mysql> insert into customer (c_id ,cname,age,phnum) values
(04,'Vanitha',24,94817686),(05,'Mani',22,77950413);
```

Query OK, 2 rows affected (0.00 sec)

Records: 2 Duplicates: 0 Warnings: 0

6. Display data from the table.

```
mysql> select * from customer;
```

c_id	cname	age	city	phnum
01	Ramesh	NULL	banglore	NULL
02	Savitha	NULL	banglore	NULL
03	Saritha	NULL	banglore	NULL
04	Vanitha	24	banglore	94817686
05	Mani	22	banglore	77950413

5 rows in set (0.00 sec)

7. Create a savepoint 'ins'.

```
mysql> savepoint up1;
Query OK, 0 rows affected (0.00 sec)
```

8. Update the first age of all the customers.

```
mysql> update customer set age=27 where c_id=01;
```

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

9. Display data from the table.

```
mysql> select *from customer;
```

```
+-----+-----+-----+-----+-----+
| c_id | cname | age | city | phnum |
+-----+-----+-----+-----+-----+
| 01 | Ramesh | 27 | banglore | NULL |
| 02 | Savitha | NULL | banglore | NULL |
| 03 | Saritha | NULL | banglore | NULL |
| 04 | Vanitha | 24 | banglore | 94817686 |
| 05 | Mani | 22 | banglore | 77950413 |
```

10. Create savepoint 'up1';

```
mysql> savepoint ins;
```

Query OK, 0 rows affected (0.00 sec)

11. Update all the customer's city of the first three customers.

```
mysql> update customer set city='Durga' where c_id=03;
```

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

```
mysql> update customer set city='Padil' where c_id=02;
```

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

```
mysql> update customer set city='Shimoga' where c_id=01;
```

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

12. Display data from the table.

```
mysql> select *from customer;
```

```
+-----+-----+-----+-----+-----+
| c_id | cname | age | city | phnum |
+-----+-----+-----+-----+-----+
| 01 | Ramesh | 27 | Shimoga | NULL |
| 02 | Savitha | NULL | Padil | NULL |
| 03 | Saritha | NULL | Durga | NULL |
| 04 | Vanitha | 24 | banglore | 94817686 |
| 05 | Mani | 22 | banglore | 77950413 |
```

13. Create savepoint 'up2'.

```
mysql> savepoint up2;
```

Query OK, 0 rows affected (0.00 sec)

14. Roll back to up1.

```
mysql> savepoint up2;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> rollback to ins;
```

Query OK, 0 rows affected (0.00 sec)

15. Display data from the table.

```
mysql> savepoint up1;
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> update customer set city='Bdvt' where c_id=03;
```

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> savepoint up2;

Query OK, 0 rows affected (0.00 sec)

mysql> select *from customer;

c_id	cname	age	city	phnum
01	Ramesh	27	Shimoga	NULL
02	Savitha	NULL	Padil	NULL
03	Saritha	NULL	Bdvt	NULL
04	Vanitha	24	banglore	94817686
05	Mani	22	banglore	77950413

5 rows in set (0.00 sec)

mysql> rollback to up1;

Query OK, 0 rows affected (0.00 sec)

mysql> select *from customer;

c_id	cname	age	city	phnum
01	Ramesh	27	Shimoga	NULL
02	Savitha	NULL	Padil	NULL
03	Saritha	NULL	banglore	NULL
04	Vanitha	24	banglore	94817686
05	Mani	22	banglore	77950413

5 rows in set (0.00 sec)

16. Commit.

```
mysql> commit;
```

Query OK, 0 rows affected (0.01 sec).

17. Display data from the table.

```
mysql> select *from customer;
```

```
+-----+-----+-----+-----+-----+
| c_id | cname | age | city | phnum |
+-----+-----+-----+-----+-----+
| 01 | Ramesh | 27 | Shimoga | NULL |
| 02 | Savitha | NULL | Padil | NULL |
| 03 | Saritha | NULL | banglore | NULL |
| 04 | Vanitha | 24 | banglore | 94817686 |
| 05 | Mani | 22 | banglore | 77950413 |
```

5 rows in set (0.00 sec)

18. Turn off the transactions.

```
mysql> set autocommit=1;
```

Query OK, 0 rows affected (0.00 sec)