

Indian Institute of Information Technology Chittoor, Sri CityCourse: **Database Management System**Duration: **120 Minutes**Roll No.: **S20200010091**Name: **Rahul Katinni**

INSTRUCTIONS:

1. Read all questions carefully and answer them in the space provided (**Strictly within the box / space provided**).
 2. Convert this document to **pdf (portable document format)** after filling the boxes.
 3. The name of the pdf must be your **Roll no.** Upload single pdf file.
 4. Crop only required part in the screenshot. Don't paste the entire screenshot unnecessarily.
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1. Consider the LibGen website where the administrators promote their books by displaying the front page. Create a table (name:LibGen_your Roll Number) with the following constraints

Id → NOT NULL AND UNIQUE

type → varchar

cost → int and cost >0

Promoted → True (fixed)

Create another new table called "Summary" with three columns:

type→ category name

priceMin→ the lowest price for all promoted books and

priceMax→ highest price for all promoted books

The "promoted" attribute on a promoted book is set to True.

Create a trigger so that, when a tuple from the "Summary" table is deleted, all Books from the corresponding category have their "promoted" attribute set to False. For example, if the entry in "Summary" for category "Novel" is deleted, all entries in "Books" with category "Novel" have their "promoted" attribute set to False.

Insert table data here

```
mysql> select * from LibGen_S20200010091;
+----+-----+-----+-----+
| Id | TypeOfBook | cost | Promoted |
+----+-----+-----+-----+
| 11 | Novel      | 2000 | 1         |
| 12 | Supernatural | 1300 | 1         |
| 13 | Horror     | 1100 | 1         |
| 14 | Horror     | 1500 | 1         |
| 15 | Fantasy    | 1700 | 1         |
| 16 | Manga      | 1000 | 1         |
| 17 | Novel      | 2000 | 1         |
| 18 | Novel      | 2500 | 1         |
| 19 | Manga      | 1500 | 1         |
| 20 | Fiction    | 1600 | 1         |
+----+-----+-----+-----+
10 rows in set (0.00 sec)
```

```
mysql> select * from Summary;
+-----+-----+-----+
| type      | priceMin | priceMax |
+-----+-----+-----+
| Novel     | 2000     | 2500     |
| Horror    | 1100     | 1500     |
| Manga     | 1000     | 1500     |
| Fiction   | 1500     | 1700     |
| Fantasy   | 1500     | 1800     |
| Supernatural | 1000     | 1500     |
| Biography | 1000     | 1500     |
| Auto-Biography | 1500     | 2000     |
| Shounen   | 2000     | 3000     |
| Yuri      | 1500     | 2000     |
+-----+-----+-----+
10 rows in set (0.00 sec)
```

Program:

```
mysql> delimiter //
mysql> create trigger Summary_delete
  -> after delete on summary for each row
  -> begin
  -> declare Booktype varchar(45);
  -> set Booktype = old.type;
  -> update libgen_s20200010091 set promoted = false where TypeOfBook = Booktype;
  -> end //
Query OK, 0 rows affected (0.02 sec)

mysql> delimiter ;
mysql> SET SQL_SAFE_UPDATES = 0;
Query OK, 0 rows affected (0.00 sec)
```

Results:

```
mysql> delete from Summary where type = "Novel";
+----+-----+-----+-----+
| Id | TypeOfBook | cost | Promoted |
+----+-----+-----+-----+
| 11 | Novel      | 2000 | 0        |
| 12 | Supernatural | 1300 | 1        |
| 13 | Biography  | 1100 | 1        |
| 14 | Horror     | 1500 | 1        |
| 15 | Fantasy    | 1700 | 1        |
| 16 | Manga      | 1000 | 1        |
| 17 | Auto-Biography | 2000 | 1        |
| 18 | Shounen    | 2500 | 1        |
| 19 | Yuri       | 1500 | 1        |
| 20 | Fiction    | 1600 | 1        |
+----+-----+-----+-----+
10 rows in set (0.00 sec)
```

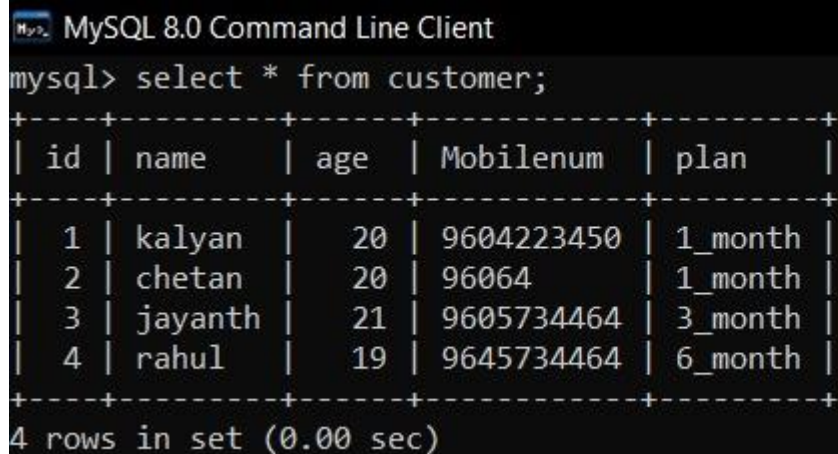
Any Observations:

Write your observation here

2. Assume the below schema for customer data belonging to BSNL mobile company.
 CUSTOMER (ID, Name, age, MobileNum, Plan)
 BASEPLAN (Code, ConnectionFee, PricePerSecond)
 PHONECALL (ID, Date, Time, CalledNum, Seconds)
 BILL (ID, Month, Year, amount)

Create a trigger that updates the customer's bill after every phone call.

Insert screenshots of table data in the space provided.



```
MySQL 8.0 Command Line Client
mysql> select * from customer;
+----+-----+-----+-----+-----+
| id | name  | age  | Mobilenum | plan  |
+----+-----+-----+-----+-----+
| 1  | kalyan | 20   | 9604223450 | 1_month |
| 2  | chetan | 20   | 96064      | 1_month |
| 3  | jayanth | 21  | 9605734464 | 3_month |
| 4  | rahul  | 19   | 9645734464 | 6_month |
+----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

Place BASEPLAN table here

Note: insert at least 5 rows

MySQL 8.0 Command Line Client

4 rows in set (0.00 sec)

mysql> select * from baseplan;

code	Connection_fee	pricepersecond
1_month	1.02	0.78
3_month	0.88	0.56
4_month	0.64	0.34
6_month	0.55	0.26
1_year	0.25	0.05

5 rows in set (0.00 sec)

Place PHONECALL Table here

Note: insert at least 5 rows

MySQL 8.0 Command Line Client

mysql> select * from phonecall;

id	date_call	time_call	callednum	seconds
101	2021-10-05	12:02	9604223450	50
102	2021-10-05	11:02	9604223450	90
103	2021-10-05	10:02	9604223450	110
103	2021-10-05	2:02	9604223450	20
103	2021-10-05	1:02	9604223450	10

5 rows in set (0.00 sec)

Place BILL Table here

Note: insert at least 5 rows

MySQL 8.0 Command Line Client

mysql> select * from bill;

id	month	year	amount
1	october	2021	1000
2	october	2021	2000
3	october	2021	1200
4	october	2021	3400
5	october	2021	1340

5 rows in set (0.00 sec)

Program:

Put your screenshot here

Result:

Put result screenshot here

Any Observations/Justification:

Write your observation here