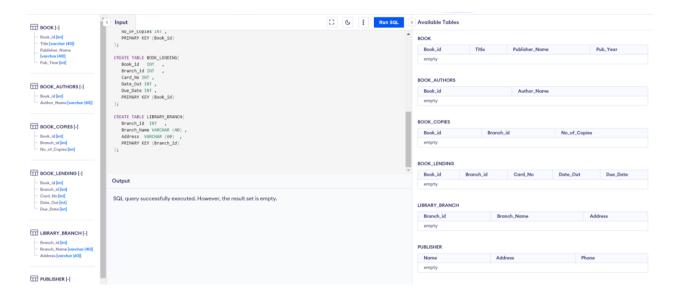
NAME : GURUBHARAN N M ROLL. NO: 201CS165

# 1. Creating table:

```
CREATE TABLE BOOK(
 Book_id INT ,
 Title VARCHAR (40),
 Publisher_Name VARCHAR (40) ,
 Pub_Year INT,
 PRIMARY KEY (Book_id)
);
CREATE TABLE BOOK_AUTHORS(
 Book_id INT ,
 Author_Name VARCHAR (40),
 PRIMARY KEY (Book_id)
);
CREATE TABLE PUBLISHER(
 Name VARCHAR (40),
 Address VARCHAR (60),
 Phone INT,
 PRIMARY KEY (Name)
);
CREATE TABLE BOOK_COPIES(
 Book_id INT ,
 Branch_id INT ,
 No_of_Copies INT,
 PRIMARY KEY (Book_id)
);
CREATE TABLE BOOK_LENDING(
 Book_id INT ,
 Branch_id INT ,
 Card_No INT,
 Date_Out INT,
 Due_Date INT,
 PRIMARY KEY (Book_id)
);
```

```
CREATE TABLE LIBRARY_BRANCH(
Branch_id INT ,
Branch_Name VARCHAR (40) ,
Address VARCHAR (60) ,
PRIMARY KEY (Branch_id)
);
```



2. Inserting values to all the tables:

Table name: BOOK

#### **INSERT INTO BOOK**

VALUES ('001', 'The Monk who Sold His Ferrari', 'Jaico Publishing House', '1946');

## **INSERT INTO BOOK**

VALUES ('002', 'The Immortals of Meluha', 'Westland Publications', '1996');

## **INSERT INTO BOOK**

VALUES ('003', 'The God of Small Things', 'Penguin Random House India', '1985');

#### **BOOK**

Book_id	Title	Publisher_Name	Pub_Year
1	The Monk who Sold His Ferrari	Jaico Publishing House	1946
2	The Immortals of Meluha	Westland Publications	1996
3	The God of Small Things	Penguin Random House India	1985

Table name: BOOK\_AUTHORS

INSERT INTO BOOK\_AUTHORS VALUES ('001', 'Robin Sharma');

INSERT INTO BOOK\_AUTHORS VALUES ('002', 'Amish Tripathi');

INSERT INTO BOOK\_AUTHORS VALUES ('003', 'Arundhati Roy');

#### BOOK\_AUTHORS

Book_id	Author_Name
1	Robin Sharma
2	Amish Tripathi
3	Arundhati Roy

**Table name: PUBLISHER** 

**INSERT INTO PUBLISHER** 

VALUES ('Jaico Publishing House', 'Russia', '+7911 123456');

**INSERT INTO PUBLISHER** 

VALUES ('Westland Publications', 'Norway', '+4789 672646');

**INSERT INTO PUBLISHER** 

VALUES ('Penguin Random House India', 'India', '+91 7864874615');

## **PUBLISHER**

Name	Address	Phone
Jaico Publishing House	Russia	+7911 123456
Westland Publications	Norway	+4789 672646
Penguin Random House India	India	+91 7864874615

**Table name: BOOK\_COPIES** 

INSERT INTO BOOK\_COPIES VALUES ('001', '102', '1500');

INSERT INTO BOOK\_COPIES VALUES ('002', '113', '2400');

INSERT INTO BOOK\_COPIES VALUES ('003', '346', '900');

## BOOK\_COPIES

Book_id	Branch_id	No_of_Copies
1	102	1500
2	113	2400
3	346	900

Table name: BOOK\_LENDING

INSERT INTO BOOK\_LENDING VALUES ('001', '102', '23','21.02.2023','17.03.2023');

INSERT INTO BOOK\_LENDING VALUES ('002', '113', '12', '28.02.2023', '25.03.2023');

INSERT INTO BOOK\_LENDING VALUES ('003', '346', '30', '02.03.2023', '28.03.2023');

#### BOOK\_LENDING

Book_id	Branch_id	Card_No	Date_Out	Due_Date
1	102	23	21.02.2023	17.03.2023
2	113	12	28.02.2023	25.03.2023
3	346	30	02.03.2023	28.03.2023

Table name: LIBRARY\_BRANCH

INSERT INTO LIBRARY\_BRANCH

VALUES ('1002', 'Central Library', 'Chennai');

INSERT INTO LIBRARY\_BRANCH VALUES ('1114', 'Digital Library','Coimbatore');

INSERT INTO LIBRARY\_BRANCH VALUES ('967', 'Pachaiyappa Library', 'Madurai');

# LIBRARY\_BRANCH

Branch_id	Branch_Name	Address
1002	Central Library	Chennai
1114	Digital Library	Coimbatore
967	Pachaiyappa Library	Madurai

# 3. Changing Datatype and adding one more Column:

ALTER TABLE BOOK\_AUTHORS ALTER Author\_name char(50);

ALTER TABLE BOOK\_COPIES ADD Books\_Taken INT;

#### BOOK\_COPIES

Book_id	Branch_id	No_of_Copies	Books_Taken
1	102	1500	
2	113	2400	
3	346	900	

4. DELETE FROM BOOK WHERE Title='The God of Small Things';

### BOOK

Book_id	Title	Publisher_Name	Pub_Year
1	The Monk who Sold His Ferrari	Jaico Publishing House	1946
2	The Immortals of Meluha	Westland Publications	1996

And contents are updated in other tables also due to the deletion of particular book in BOOK table

5.

```
SELECT CARD_NO
FROM BOOK_LENDING
WHERE DATE_OUT BETWEEN '2017-01-01' AND '2017-06-01'
GROUP BY CARD_NO
HAVING COUNT(*)>3;
```

6.

ALTER TABLE BOOK\_COPIES RENAME No\_of\_Copies TO Total\_Copies;

# BOOK\_COPIES

Book_id	Branch_id	Total_Copies	Books_Taken
1	102	1500	
2	113	2400	
3	346	900	

7.

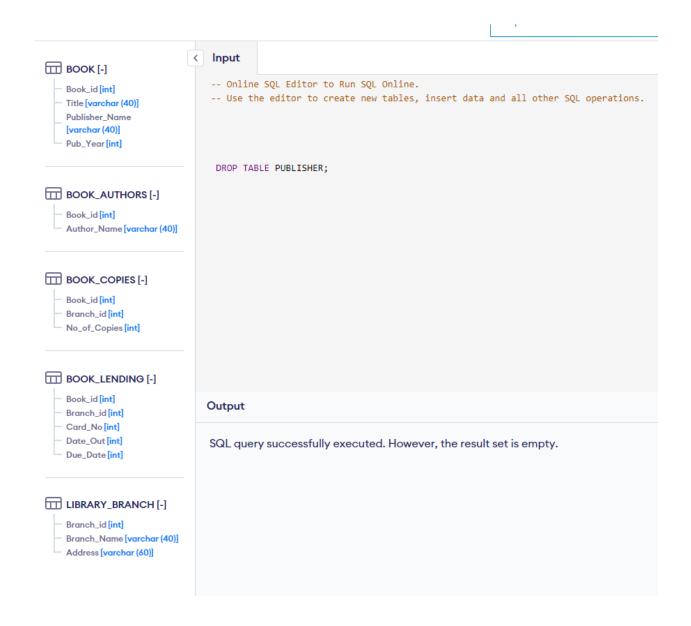
TRUNCATE TABLE PUBLISHER;

# BOOK\_LENDING

Book_id	Branch_id	Card_No	Date_Out	Due_Date
empty				

8.

DROP TABLE PUBLISHER;

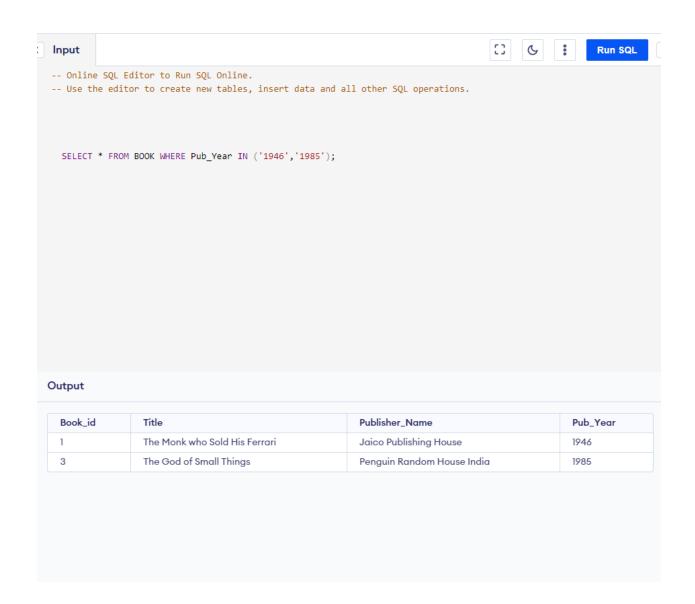


SELECT \* FROM BOOK\_AUTHORS WHERE Book\_id BETWEEN 1 AND 2

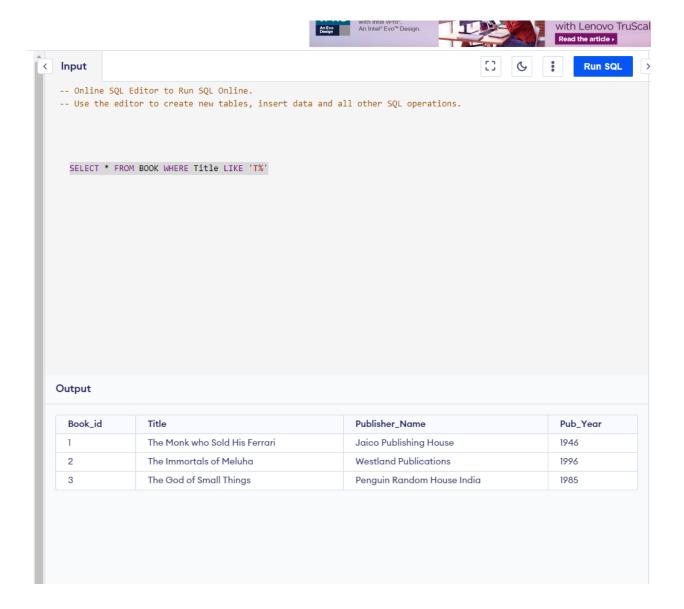
9.

C 6 : Run SQL Input -- Online SQL Editor to Run SQL Online. -- Use the editor to create new tables, insert data and all other SQL operations. SELECT \* FROM BOOK\_AUTHORS WHERE Book\_id BETWEEN 1 AND 2 Output Book\_id Author\_Name 1 Robin Sharma 2 Amish Tripathi

SELECT \* FROM BOOK WHERE Pub\_Year IN ('1946','1985');

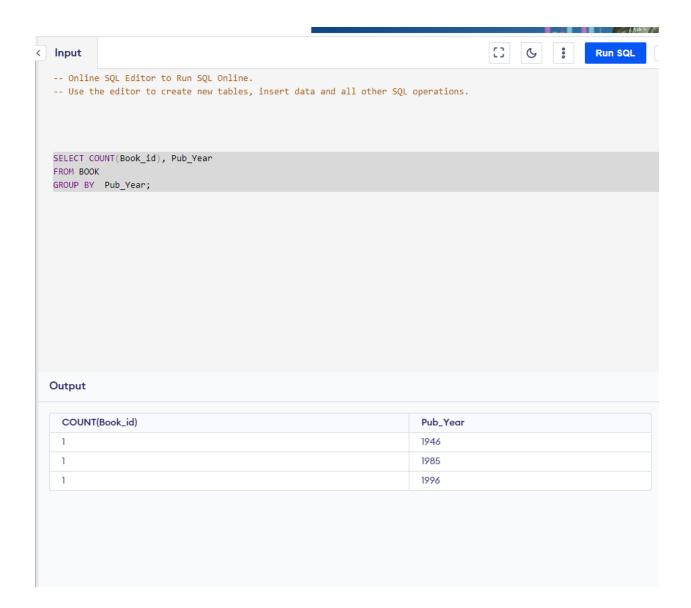


SELECT \* FROM BOOK WHERE Title LIKE 'T%'



10.

SELECT COUNT(Book\_id), Pub\_Year FROM BOOK GROUP BY Pub\_Year;



SELECT Branch\_id FROM LIBRARY\_BRANCH ORDER BY Branch\_id ASC; Input

-- Online SQL Editor to Run SQL Online.
-- Use the editor to create new tables, insert data and all other SQL operations.

SELECT Branch\_id
FROM LIBRARY\_BRANCH
ORDER BY Branch\_id ASC;

Output

Branch\_id
967