

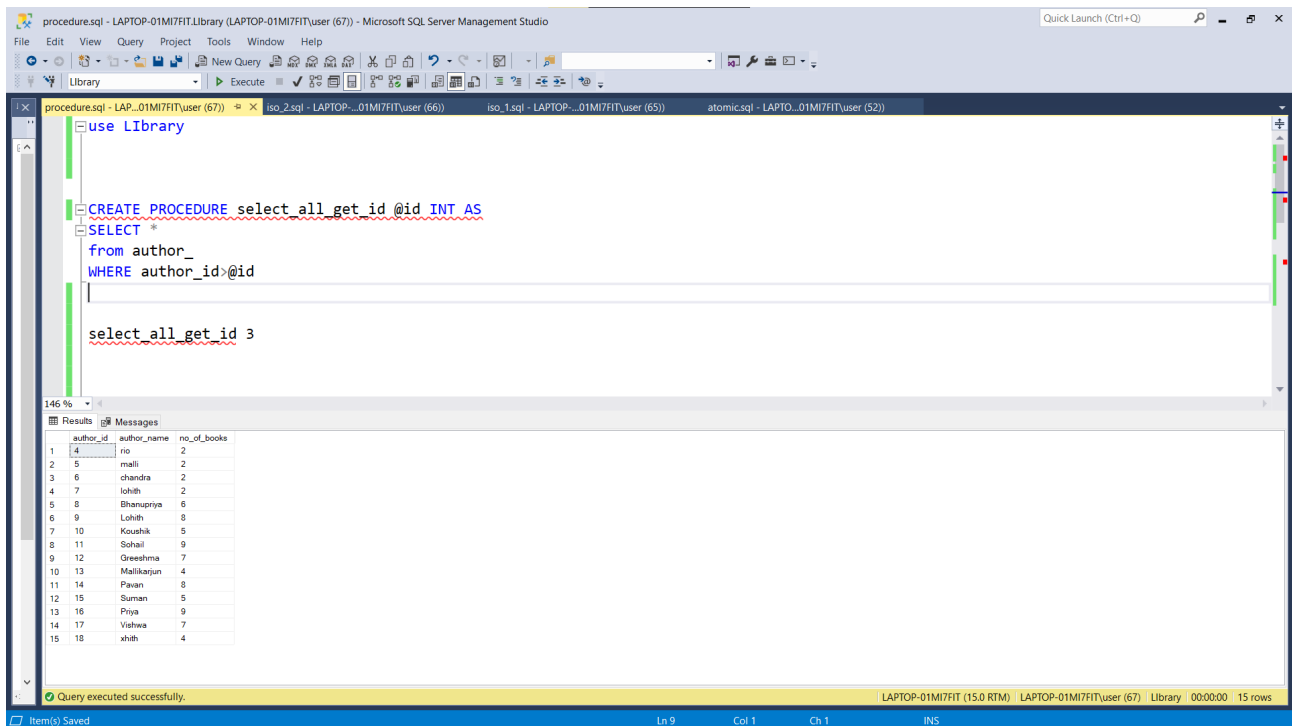
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1) Write two stored Procedures relevant to your database.

A)

Procedure 1 :-



The screenshot displays the Microsoft SQL Server Management Studio interface. The main query editor window shows the following SQL code:

```
use Library

CREATE PROCEDURE select_all_get_id @id INT AS
SELECT *
from author_
WHERE author_id>@id

select_all_get_id 3
```

Below the query editor, the Results pane shows the output of the stored procedure execution. The results are displayed in a table with three columns: author_id, author_name, and no_of_books. The data is as follows:

author_id	author_name	no_of_books
4	rio	2
5	mali	2
6	chandra	2
7	lohit	2
8	Bhanupriya	6
9	Lohith	8
10	Koushik	5
11	Sohail	9
12	Greeshma	7
13	Malikarjun	4
14	Pavan	8
15	Suman	5
16	Priya	9
17	Vishwa	7
18	xhith	4

The status bar at the bottom indicates that the query was executed successfully, returning 15 rows.

Procedure 2 :-

procedure.sql - LAPTOP-01M7FIT.Library (LAPTOP-01M7FIT\user (67)) - Microsoft SQL Server Management Studio

```

CREATE PROCEDURE Selectall__contains @string varchar(20)
as
SELECT * FROM books_ WHERE books_.BOOK_NAME LIKE concat('%',@string,'%')

Selectall__contains 'a'

```

Results

ID	BOOK_NAME	author_id	PRICE	barcode_	category	no_of_issues	published_year	bought_year
1	Natural Disaster	1	1000	2938476	209	12	2010	2012
2	In the Dark	1	567	98567	405	23	2011	2012
3	Caught up	4	1070	89456	708	45	2012	2013
4	Leave me alone	6	988	875342348	134	6	2016	2016
5	My Band	7	890	764563	122	5	2010	2012
6	Fantasy Girl	8	799	432653	342	4	2001	2012
7	No Flaws	15	679	45653	564	11	2002	2004
8	Caught up	4	1070	456358	879	75	1994	2012
9	Leave me alone	6	988	8563425	234	13	2010	2012
10	My Band	7	890	65476	323	12	1996	2020
11	Fantasy Girl	8	799	79678	567	12	1996	2020
12	No Flaws	9	679	345476	343	13	2010	2012
13	ALONE	9	1000	1111	0	1	2002	2020

Query executed successfully.

2) Write a transaction to illustrate atomicity (related to your database)

A)

atomic.sql - LAPTOP-01M7FIT.Library (LAPTOP-01M7FIT\user (52)) - Microsoft SQL Server Management Studio

```

BEGIN
    BEGIN TRY
        BEGIN TRANSACTION
            UPDATE author_ set no_of_books = 20 WHERE author_id=18
        INSERT INTO author_
            VALUES(1, 'lohit', 10)

        COMMIT TRANSACTION
        print('committed')
    END TRY
    BEGIN CATCH
        ROLLBACK TRANSACTION
    END CATCH
END

SELECT top 2 * FROM author_ ORDER BY author_id desc

```

Results

author_id	author_name	no_of_books
18	xhith	4
17	Vishwa	7

Query executed successfully.

3) Write a transaction to illustrate isolation level. It can be on commit or uncommit read

A)

The screenshot shows the Microsoft SQL Server Management Studio interface. The main query window contains the following T-SQL script:

```
use Library

BEGIN TRAN
UPDATE books_ set PRICE = PRICE - 100
WHERE ID = 1
WAITFOR DELAY '00:00:03'
ROLLBACK TRAN

SELECT ID, BOOK_NAME, PRICE FROM books_ WHERE ID =1
```

Below the script, the Results pane displays the output of the final SELECT statement:

ID	BOOK_NAME	PRICE
1	Natural Disaster	1000

The status bar at the bottom indicates "Query executed successfully." and "1 rows".

Microsoft SQL Server Management Studio interface showing a query execution.

Query Text:

```
use Library
set TRANSACTION ISOLATION LEVEL READ UNCOMMITTED
SELECT ID,BOOK_NAME,PRICE from books_ WHERE ID =1
```

Results:

ID	BOOK_NAME	PRICE
1	Natural Disaster	900

Status Bar: Query executed successfully. LAPTOP-01MI7FIT (15.0 RTM) LAPTOP-01MI7FIT\user (66) Library 00:00:00 1 rows