

# DBMS

## LAB ASSIGNMENT

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1) Write two stored procedures relevant to your database.

Sol:

Procedure - i:

```
use Library

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

select_all_get_id 3
```

146 %

Results Messages

	author_id	author_name	no_of_books
1	4	rio	2
2	5	malli	2
3	6	chandra	2
4	7	lohith	2
5	8	Bhanupriya	6
6	9	Lohith	8
7	10	Koushik	5
8	11	Sohail	9
9	12	Greeshma	7
10	13	Mallikarjun	4
11	14	Pavan	8
12	15	Suman	5
13	16	Priya	9
14	17	Vishwa	7
15	18	xhith	4

Query executed successfully.

## Procedure - ii:

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

Selectall\_\_contains 'a'

150 %

Results Messages

	ID	BOOK_NAME	author_id	PRICE	barcode_	category	no_of_issues	published_year	bought_year
1	1	Natural Disaster	1	1000	2938476	209	12	2010	2012
2	2	In the Dark	1	567	98567	405	23	2011	2012
3	3	Caught up	4	1070	89456	708	45	2012	2013
4	7	Leave me alone	6	988	875342346	134	6	2016	2016
5	8	My Band	7	890	764563	122	5	2010	2012
6	9	Fantasy Girl	8	799	432653	342	4	2001	2012
7	10	No Flaws	15	679	45653	564	11	2002	2004
8	14	Caught up	4	1070	456358	879	75	1994	2012
9	18	Leave me alone	6	988	8563425	234	13	2010	2012
10	19	My Band	7	890	65476	323	12	1996	2020
11	20	Fantasy Girl	8	799	79678	567	12	1996	2020
12	21	No Flaws	9	679	345476	343	13	2010	2012
13	23	ALONE	9	1000	1111	0	1	2002	2020

Query executed successfully.

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

Sol:

```
BEGIN
BEGIN TRY
    BEGIN TRANSACTION
        UPDATE author_ set no_of_books = 20 WHERE author_id=18
INSERT INTO author_
VALUES(1, 'lohith', 10)
COMMIT TRANSACTION
print('committed')
END TRY
BEGIN CATCH
    ROLLBACK TRANSACTION
END CATCH
END

SELECT top 2 * FROM author_ ORDER BY author_id desc
```

150 %

Results Messages

	author_id	author_name	no_of_books
1	18	xhith	4
2	17	Vishwa	7

Query executed successfully.

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

Sol:

```
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
```

150 %

ID	BOOK_NAME	PRICE
1	Natural Disaster	1000

Query executed successfully.

```
use Library
set TRANSACTION ISOLATION LEVEL READ UNCOMMITTED

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

150 %

ID	BOOK_NAME	PRICE
1	Natural Disaster	900

Query executed successfully.