# B.Sc. Engg. 1st Batch 4th Year 1st Semester 2019

# DBMS LAB

**DISCUSSION-3**

1. Stored Procedure

Stored Procedures are database objects where multiple SQL statements can be executed as a batch. Stored procedures once created stays in the database and can be executed from client side.

The following stored procedure shows authors name of a given title\_id

CREATE PROC sp\_showTitleAndAuthor AS

BEGIN

SELECT "Authors Last Name"=au\_lname FROM authors where au\_id in (select au\_id from titleauthor where title\_id='BU1032')

END

To execute the just created Stored Procedure the command is EXEC sp\_showTitleAndAuthor

To modify an existing stored procedure use the following statements ALTER PROC sp\_showTitleAndAuthor

AS BEGIN

--- END

To delete the stored procedure from the database DROP PROC sp\_showTitleAndAuthor

1. Parameterized Stored procedure

Like function arguments Stored Procedures can accept values when being executed and can also return values.

Example: Modifying the procedure created in 1 that accepts an title\_id and shows the corresponding author name

ALTER PROC sp\_showTitleAndAuthor @titleid char(15) AS

BEGIN

SELECT "Authors Last Name"=au\_lname FROM authors where au\_id in (select au\_id from titleauthor where title\_id=@titleid) END

1. Stored procedures with decision making/ looping constructs

The following procedure can be used to increase the price of a particular book by 10% but on the condition that the new price does not cross $20

CREATE PROC sp\_updatePrice @titleid char(15) AS

BEGIN

DECLARE @price MONEY

SELECT @price=price from TITLES WHERE title\_id=@titleid set @price=@price+0.1\*@price

IF @price<=20

UPDATE titles SET price= @price WHERE title\_id=@titleid

END

EXEC sp\_updatePrice 'BU7832' Assignments

Using the tables created in the last class (i.e., CustomerAndSuppliers, Items, Transactions) perform the following tasks

# Task 1:

Write a stored procedure that prints out item categories, total number of items available and average price of that category in the following format.

Category Total number of items Average Price

# Task: 2

Write a stored procedure that

* 1. accepts as two inputs, i.e., i) category name and ii) price value
  2. And shows the item details under that category that are cheaper than the accepted price value

# Task 3:

Write a stored procedure that

1. Accepts as input i) category name and ii) desired average price value
2. And increase the price of each item under that category by 10% until the new average price crosses the desired average price value.