

1. Create Procedure:

```
Create Procedure BN_GetData( )  
Begin  
    Select * from Borrower;  
End //
```

Run procedure:- mysql> call BN_GetData()//

2. With IN Parameter :

```
Create Procedure BN_GetData1( IN ID Int)  
Begin  
    Select * from Borrower  
    Where Roll_NO= ID;  
End //
```

Run procedure:- mysql> call BN_GetData(105)//

3. With Out Parameter:

```
Create Procedure BN_Data_out(OUT R1 Int)  
Begin  
    Set R1=10;  
End //
```

Run procedure:- mysql> call BN_Data_out(@ S1)//

mysql>select @s1//

4. Variables in Procedures:

Query- Insert new row into table Borrower

Solution: As per the Borrower table we required five variables to insert data into borrower table.

```

Create Procedure BN_Variables( )
Begin
    Declare Var1 int;
    Declare Var2, Var3,Var4 varchar (20);
    Declare Var5 Date;
    SET Var1=106;
    SET Var2= 'Nyan';
    SET Var3= 'ML';
    SET Var4= 'Issue';
    SET Var5= '2019-08-22';
    Insert into Borrower values (Var1,Var2,Var5,Var3,Var4);
    Select * from Borrower;
End//

```

```

mysql> call BN_Variables()//
+-----+-----+-----+-----+-----+
| Roll_NO | Name   | Date_of_Issue | Book_Name | Status |
+-----+-----+-----+-----+-----+
| 101     | Raghavi | 2019-08-10    | DBMS      | Issue  |
| 102     | Lobhas  | 2019-07-13    | SQL       | Issue  |
| 103     | Sumit   | 2019-07-14    | DS        | Issue  |
| 104     | Sham    | 2019-07-20    | TOC       | Issue  |
| 105     | Mohit   | 2019-06-15    | MATH      | Issue  |
| 106     | Nyan    | 2019-08-22    | ML        | Issue  |
+-----+-----+-----+-----+-----+
6 rows in set (0.08 sec)

```

4. IF-Then-Else

```

Create Procedure BN_IF_Then_Else(IN T1 Int)
Begin
    IF(T1>101&&T1<107)
    Then
        select * from Borrower
        where Roll_NO=T1;
    Else
        Select 'Not Found';
    End If;
End//

```

```
mysql> Call BN_IF_Then_Else(102)//
+-----+-----+-----+-----+-----+
| Roll_NO | Name   | Date_of_Issue | Book_Name | Status |
+-----+-----+-----+-----+-----+
|      102 | Lobhas | 2019-07-13    | SQL       | Issue  |
+-----+-----+-----+-----+-----+
1 row in set (0.07 sec)

Query OK, 0 rows affected (0.07 sec)

mysql> Call BN_IF_Then_Else(108)//
+-----+
| Not Found |
+-----+
| Not Found |
+-----+
1 row in set (0.00 sec)
```

5. Loops:

WHILE ... END WHILE

Create table Temp (val int)//

Create Procedure BN_While_Loop()

Begin

DECLARE v INT;

SET v = 0;

WHILE v < 5 DO

Insert Into Temp Values (v);

SET v = v + 1;

END WHILE;

END//

```
mysql> call BN_While_Loop()//
Query OK, 1 row affected (0.02 sec)
```

```
mysql> Select * from Temp//
```

```
+-----+
| var  |
+-----+
| 0    |
| 1    |
| 2    |
| 3    |
| 4    |
+-----+
```

```
5 rows in set (0.00 sec)
```

REPEAT ... END REPEAT

Create table Temp1(val int)

Create Procedure BN_Reapet_Loop ()

Begin

 Declare v Int;

 SET v = 0;

 REPEAT

 Insert into Temp1 values (v);

 SET v = v + 1;

 UNTIL v >= 5

 END REPEAT;

End; //

```
mysql> call BN_Reapet_Loop();//
Query OK, 1 row affected (0.09 sec)
```

```
mysql> Select * from Temp1;
```

```
-> //
```

```
+-----+
```

```
| var |
```

```
+-----+
```

```
| 0 |
```

```
| 1 |
```

```
| 2 |
```

```
| 3 |
```

```
| 4 |
```

```
+-----+
```

```
5 rows in set (0.00 sec)
```

Query: Check the number of days (from date of issue), if days are between 15 to 30 then fine amount will be Rs 5per day. If no. of days>30, per day fine will be Rs 50 per day & for days less than 30, Rs. 5 per day. After submitting the book, status will change from Issue to Return. If condition of fine is true, then details will be stored into fine table.

Delimiter //

/*****

**Description: Accpet Roll Number and Book Name and calculate Fine amount as per
Number of days. Handle Exception if Roll Number not found.**

Create Date: 03-10-2019

*******/**

Create Procedure BRN(Roll_New int,Book_Name Varchar(15))

BEGIN

Declare X1 integer;

Declare Continue Handler for NOT FOUND

BEGIN

Select 'Not Found';

END;

Select DATEDIFF (curdate(), Date_of_Issue) into X1 from Borrower where

Roll_NO=Roll_New;

IF (X1>15&&X1<30)

Then

Insert Into Fine Values(Roll_New, curdate(),(X1*5));

UPDATE Borrower SET Status='Return' WHERE Roll_NO=Roll_New;

End IF;

IF (X1>30)

Then

Insert into Fine values(Roll_New, curdate(),(X1*50));

UPDATE Borrower SET Status='Return' WHERE Roll_NO=Roll_New;

End IF ;

END;

//