# UE20CS301

# Database Management System

Lab 8 – Functions and Procedures

Name     : Renita Kurian

SRN      : PES1UG20CS331

Roll No. : 13

## 1. Function

```
MariaDB [railway_system]> CREATE FUNCTION number_of_tickets(U_ID varchar(255))
    -> RETURNS VARCHAR(50)
    -> DETERMINISTIC
    -> BEGIN
    -> DECLARE result VARCHAR(50);
    ->     DECLARE ticket_count int;
    ->
    ->     SELECT count(PNR) into ticket_count
    -> FROM Ticket_331
    -> WHERE UserID = U_ID AND
    ->     MONTH(TravelDate) = MONTH(sysdate()) AND
    -> YEAR(TravelDate) = YEAR(sysdate());
    ->
    -> IF ticket_count > 3 THEN
    -> SET result = 'purchase limit exceeded"';
    -> ELSE
    -> SET result = 'tickets may be purchased';
    -> END IF;
    -> RETURN result;
    -> END; $$
Query OK, 0 rows affected (0.005 sec)
```

```
MariaDB [railway_system]> SELECT UserID, number_of_tickets(UserID) FROM User_331;
+---------+---------------------------+
| UserID  | number_of_tickets(UserID) |
+---------+---------------------------+
| ADM_001 | tickets may be purchased  |
| ADM_002 | tickets may be purchased  |
| ADM_003 | tickets may be purchased  |
| USR_001 | tickets may be purchased  |
| USR_002 | tickets may be purchased  |
| USR_003 | tickets may be purchased  |
| USR_004 | tickets may be purchased  |
| USR_005 | tickets may be purchased  |
| USR_006 | tickets may be purchased  |
| USR_007 | tickets may be purchased  |
| USR_008 | tickets may be purchased  |
| USR_009 | tickets may be purchased  |
| USR_010 | tickets may be purchased  |
| USR_011 | tickets may be purchased  |
| USR_012 | tickets may be purchased  |
| USR_013 | tickets may be purchased  |
| USR_014 | tickets may be purchased  |
| USR_015 | tickets may be purchased  |
| USR_016 | tickets may be purchased  |
| USR_017 | tickets may be purchased  |
| USR_018 | tickets may be purchased  |
| USR_019 | tickets may be purchased  |
| USR_020 | tickets may be purchased  |
```

## 2. Procedure

```
MariaDB [railway_system]> DELIMITER $$
MariaDB [railway_system]> CREATE procedure update_age(IN U_ID varchar(30), IN DOB DATE)
    -> BEGIN
    -> DECLARE new_age int;
    -> SET new_age = FLOOR(DATEDIFF(CURRENT_DATE,DOB)/365);
    -> UPDATE User_331 set Age = new_age where UserID = U_ID;
    -> END;$$
Query OK, 0 rows affected (0.009 sec)

MariaDB [railway_system]> DELIMITER ;
MariaDB [railway_system]>
MariaDB [railway_system]> SELECT * from USER_331 WHERE UserID='ADM_001' ;
+---------+------+-----------+-------+------------+--------+---------+---------------+
| UserID  | Age  | Fname     | LName | DOB        | U_Type | Pincode | StreetNo      |
+---------+------+-----------+-------+------------+--------+---------+---------------+
| ADM_001 |   33 | Narendra  | Modi  | 1989-04-14 | ADMIN  |  600047 | Old Jail Road |
+---------+------+-----------+-------+------------+--------+---------+---------------+
1 row in set (0.001 sec)

MariaDB [railway_system]> CALL update_age('ADM_001','1989-04-14');
Query OK, 0 rows affected (0.006 sec)
```