## DATABASE MANAGEMENT SYSTEMS LAB

## Week 8

Vanshika Goel	PES1UG20CS484	Section H	Roll No 40

1. Write a function to find the number of tickets booked by a customer. If no. of tickets is more than 3 for the current month then display error message as "cannot purchase tickets current limit is over".

```
mysql> DELIMITER $$
mysql> CREATE FUNCTION ticketsPurchase(User varchar(255))
    -> RETURNS VARCHAR(50)
    -> DETERMINISTIC
    -> BEGIN
    -> DECLARE result VARCHAR(50);
        DECLARE count_tickets INT;
    -> SELECT COUNT(Pnr) INTO count_tickets
    -> FROM TICKET_484
-> WHERE User_id=User AND YEAR(Travel_date)=YEAR(sysdate()) AND MONTH(Travel_date)=MONTH(sysdate());
    -> IF count_tickets > 3 THEN
    -> SET result='Cannot purchase ticket. Current Limit is over';
    -> ELSE
        SET result='Can purchase ticket.';
    -> END IF;
    -> RETURN result;
    -> END $$;
Query OK, 0 rows affected (0.02 sec)
    -> DELIMITER ;
    ->
^C
[mysql> DELIMITER ;
mysql> SELECT User_id, ticketsPurchase(User_id) FROM USER_484;
  User_id | ticketsPurchase(User_id) |
  ADM_001 |
            Can purchase ticket.
  ADM_002 | Can purchase ticket.
  ADM_003 | Can purchase ticket.
USR_001 | Can purchase ticket.
  USR_002 | Can purchase ticket.
  USR_003 | Can purchase ticket.
  USR 004
          | Can purchase ticket.
  USR_005 | Can purchase ticket.
  USR_006 | Can purchase ticket.
  USR_007 | Can purchase ticket.
  USR_008 | Can purchase ticket.
           | Can purchase ticket.
  USR_009
  USR_010 | Can purchase ticket.
  USR_011 | Can purchase ticket.
  USR_012 | Can purchase ticket.
  USR_013 | Can purchase ticket.
  USR_014 | Can purchase ticket.
  USR_015 | Can purchase ticket.
  USR_016 | Can purchase ticket.
  USR_017
          | Can purchase ticket.
  USR_018 | Can purchase ticket.
  USR_019 | Can purchase ticket.
  USR_020
          | Can purchase ticket.
  USR_021 | Can purchase ticket.
  USR_022 | Can purchase ticket.
  USR_023 | Can purchase ticket.
  USR_024 | Can purchase ticket.
  USR_025 | Can purchase ticket.
  USR_026 | Can purchase ticket.
  USR_027 | Can purchase ticket.
  USR_028 | Can purchase ticket.
  USR_029 | Can purchase ticket.
  USR_030 | Can purchase ticket.
33 rows in set (0.01 sec)
mysql> 📕
```

2. Write a stored procedure to calculate the age of the customer when the date of birth is given. Update the column named age in the customer table.

```
mysql> DELIMITER $$
mysql> CREATE PROCEDURE update_age(IN User_id varchar(255), IN Date_of_birth date)
    -> BEGIN
    -> DECLARE age_new INT;
    -> SET age_new=FLOOR(DATEDIFF(CURRENT_DATE, Date_of_birth)/365);
    -> UPDATE USER_484 SET Age=age_new WHERE User_id=User_id;
    -> END; $$
[Query OK, 0 rows affected (0.00 sec)
mysql> DELIMITER ;
mysql> SELECT * FROM USER_484 WHERE User_id='ADM_001';
 User_id | User_type
                                                  | Date_of_birth
                      | Fname
                                     Lname
                                             Age
                                                                    Pincode
                                                                              Street_no
  ADM_001 |
            ADMIN
                        Narendra
                                     Modi
                                               33
                                                   1989-04-14
                                                                    600047
                                                                              Old Jail Road
1 row in set (0.01 sec)
mysql> CALL update_age('ADM_001','1989-04-14');
Query OK, 32 rows affected (0.01 sec)
mysql> SELECT * FROM USER_484 WHERE User_id='ADM_001';
 User_id | User_type | Fname
                                                  | Date_of_birth
                                                                    Pincode
                                    Lname
                                             Age
                                                                              Street_no
                                                 1989-04-14
  ADM_001 | ADMIN
                                                                              Old Jail Road
                        Narendra
                                    Modi
                                               33
                                                                    600047
1 row in set (0.00 sec)
mysql>
```