

DBMS LAB 8

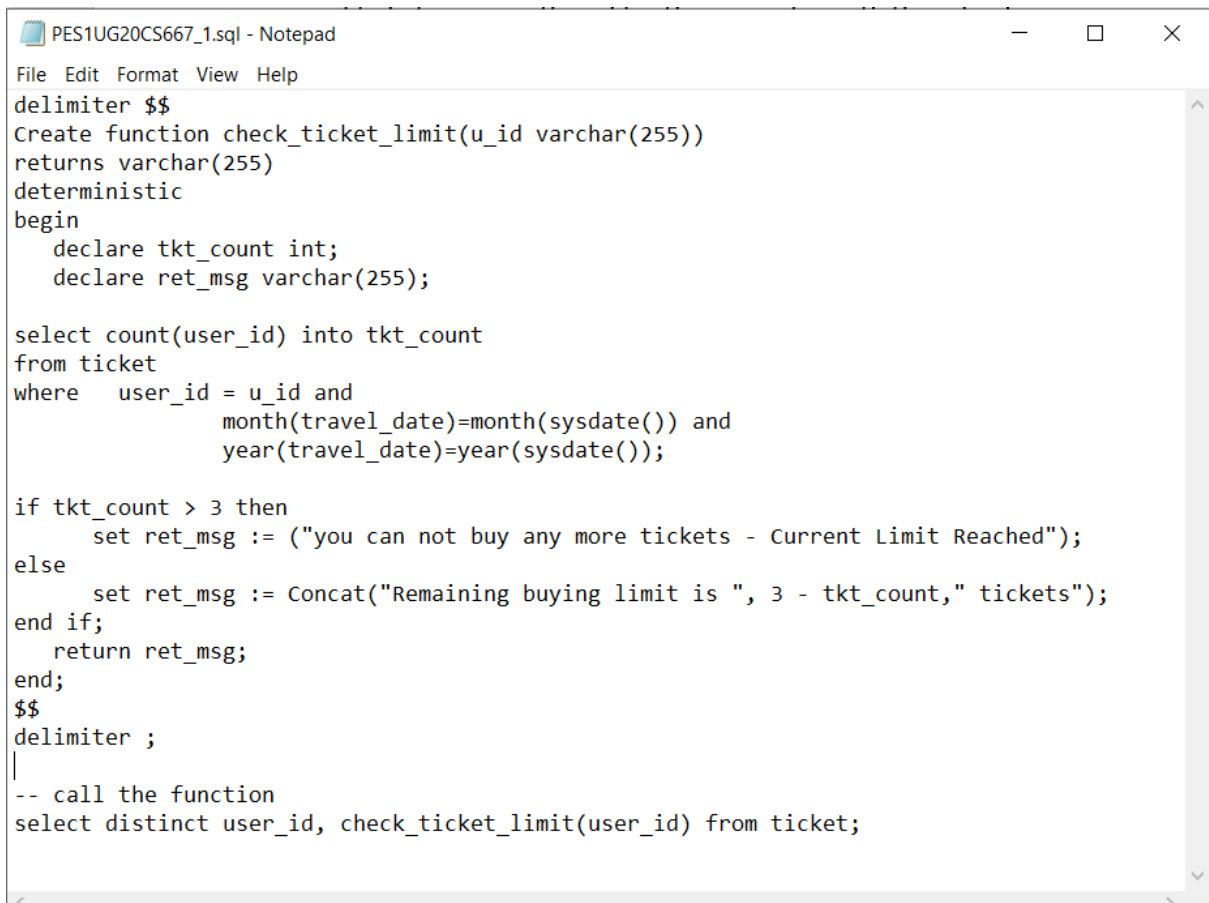
NAME: NIKHIL RAJU MOHITE

SRN: PES1UG20CS667

SECTION: K

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"

SQL Code:

A screenshot of a Notepad window titled "PES1UG20CS667_1.sql - Notepad". The window contains SQL code for creating a function and calling it. The code is as follows:

```
File Edit Format View Help
delimiter $$
Create function check_ticket_limit(u_id varchar(255))
returns varchar(255)
deterministic
begin
    declare tkt_count int;
    declare ret_msg varchar(255);

    select count(user_id) into tkt_count
    from ticket
    where user_id = u_id and
          month(travel_date)=month(sysdate()) and
          year(travel_date)=year(sysdate());

    if tkt_count > 3 then
        set ret_msg := ("you can not buy any more tickets - Current Limit Reached");
    else
        set ret_msg := Concat("Remaining buying limit is ", 3 - tkt_count," tickets");
    end if;
    return ret_msg;
end;
$$
delimiter ;

-- call the function
select distinct user_id, check_ticket_limit(user_id) from ticket;
```

Command Prompt - mysql -u root

MariaDB [cs667_rr]> delimiter \$\$

MariaDB [cs667_rr]> Create function check_ticket_limit(u_id varchar(255))

-> returns varchar(255)

-> deterministic

-> begin

-> declare tkt_count int;

-> declare ret_msg varchar(255);

->

-> select count(user_id) into tkt_count

-> from ticket

-> where user_id = u_id and

-> month(travel_date)=month(sysdate()) and

-> year(travel_date)=year(sysdate());

->

-> if tkt_count > 3 then

-> set ret_msg := ("you can not buy any more tickets - Current Limit Reached");

-> else

-> set ret_msg := Concat("Remaining buying limit is ", 3 - tkt_count," tickets");

-> end if;

-> return ret_msg;

-> end;

-> \$\$

Query OK, 0 rows affected (0.018 sec)

MariaDB [cs667_rr]> delimiter ;

MariaDB [cs667_rr]> select distinct user_id, check_ticket_limit(user_id) from ticket;

user_id	check_ticket_limit(user_id)
ADM_001	Remaining buying limit is 3 tickets
ADM_003	Remaining buying limit is 3 tickets
USR_002	Remaining buying limit is 3 tickets
ADM_002	Remaining buying limit is 3 tickets
USR_007	Remaining buying limit is 3 tickets
USR_008	Remaining buying limit is 3 tickets
USR_009	Remaining buying limit is 3 tickets
USR_010	Remaining buying limit is 3 tickets
USR_012	Remaining buying limit is 3 tickets

9 rows in set (0.002 sec)

MariaDB [cs667_rr]>

- 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.

SQL Code

```
PES1UG20CS667_2.sql - Notepad
File Edit Format View Help
DELIMITER $$
CREATE procedure calculate_age()
BEGIN
    DECLARE TodayDate DATE;
    SELECT CURRENT_DATE() INTO TodayDate;
    UPDATE user
    SET age= YEAR(TodayDate) -year(dob);
END$$
DELIMITER ;
```

Before

Command Prompt - mysql -u root

MariaDB [cs667_rr]> select * from user;

user_id	user_type	fname	lname	age	dob	pincode	street_no
ADM_001	ADMIN	Narendra	Modi	0	1989-04-14	600047	Old Jail Road
ADM_002	ADMIN	Droupadi	Murmu	0	1990-04-14	640012	High Street
ADM_003	ADMIN	Manmohan	Singh	0	1991-04-08	575003	Pumpwell Road
USR_001	PSGR	Ajit	Ullal	0	1971-01-01	560001	10, Janpath
USR_002	PSGR	Muhammed	Ali	0	2000-10-09	560003	10, Downing
USR_003	PSGR	Sai Deepak	Reddy	0	1996-12-12	600001	14, Kailsh Marg
USR_004	PSGR	Rudra	Agarwal	0	1996-12-13	600042	5, Lohia Garden
USR_005	PSGR	Rahul	Khanna	0	1997-12-14	600067	1, Pink Street
USR_006	PSGR	Nirmala	Seturaman	0	1998-12-15	560105	3, Blue Avenue
USR_007	PSGR	Smriti	Irani	0	1999-12-16	575014	4, Banyan Avenue
USR_008	PSGR	Ajit	Sethi	0	1966-04-14	575001	6, Poes Garden
USR_009	PSGR	Arjun	Allu	0	1967-04-08	575020	7, Dhamaka street
USR_010	PSGR	Samanta	Prabhu	0	1968-04-14	600042	8, Clone Colony
USR_011	PSGR	Kiran	Bedi	0	1969-04-14	560003	56, Brigade Road
USR_012	PSGR	Rahul	Gandhi	0	1970-04-08	475001	Mirza road
USR_013	PSGR	Rashkit	Shetty	0	1971-04-14	560009	JC Road
USR_014	PSGR	Rishi	Sunak	0	1972-04-14	600034	Anna Sali
USR_015	PSGR	Vedavalli	Srinath	0	1973-04-14	560054	Church Street, Bangalore
USR_016	PSGR	Subbu	Saravana	0	1974-04-14	600043	American Street
USR_017	PSGR	Sheela	Dixit	0	1975-04-08	560048	Kasturba Road
USR_018	PSGR	Margaret	Alva	0	1976-04-14	560008	New BEL Road
USR_019	PSGR	Arun	Kumar	0	1977-04-14	600046	Mint Street
USR_020	PSGR	Anshu	Bhardwaj	0	1978-04-14	575001	KSR Road
USR_021	PSGR	Suma	Sampat	0	1979-04-08	560012	Old Airport Road, Bangalore
USR_022	PSGR	Srihari	Udupa	0	1980-04-14	560015	Suranjan Das Road
USR_023	PSGR	Satish	Kotian	0	1981-04-14	600044	T Nagar
USR_024	PSGR	Shradha	Nayar	0	1982-04-08	560006	M G Road, Bangalore
USR_025	PSGR	Manisha	Solanki	0	1983-04-08	575030	M G Road
USR_026	PSGR	Bharti	Devgan	0	1984-04-14	560059	NAL Wind Tunnel Road
USR_027	PSGR	Roopa	Ram	0	1985-04-14	575023	Bunder Road
USR_028	PSGR	Pallavi	Ram	0	1986-04-08	560044	Lavelle Road
USR_029	PSGR	Ravi	Naik	0	1987-04-14	600045	Thiru V ka Salai
USR_030	PSGR	Virat	Murthy	0	1988-04-14	575011	Bejai New Road

33 rows in set (0.001 sec)

MariaDB [cs667_rr]> _

```

C:\> Command Prompt - mysql -u root
MariaDB [cs667_rr]> DELIMITER $$
MariaDB [cs667_rr]> CREATE procedure calculate_age()
    -> BEGIN
    ->     DECLARE TodayDate DATE;
    ->     SELECT CURRENT_DATE() INTO TodayDate;
    ->     UPDATE user
    ->     SET age= YEAR(TodayDate) -year(dob);
    -> END$$
Query OK, 0 rows affected (0.021 sec)

MariaDB [cs667_rr]> DELIMITER ;
MariaDB [cs667_rr]> call calculate_age();
Query OK, 34 rows affected (0.019 sec)

```

After procedure call

```

C:\> Command Prompt - mysql -u root
MariaDB [cs667_rr]> select * from user;
+-----+-----+-----+-----+-----+-----+-----+-----+
| user_id | user_type | fname | lname | age | dob | pincode | street_no |
+-----+-----+-----+-----+-----+-----+-----+-----+
| ADM_001 | ADMIN | Narendra | Modi | 33 | 1989-04-14 | 600047 | Old Jail Road |
| ADM_002 | ADMIN | Droupadi | Murmu | 32 | 1990-04-14 | 640012 | High Street |
| ADM_003 | ADMIN | Manmohan | Singh | 31 | 1991-04-08 | 575003 | Pumpwell Road |
| USR_001 | PSGR | Ajit | Ullal | 51 | 1971-01-01 | 560001 | 10, Janpath |
| USR_002 | PSGR | Muhammed | Ali | 22 | 2000-10-09 | 560003 | 10, Downing |
| USR_003 | PSGR | Sai Deepak | Reddy | 26 | 1996-12-12 | 600001 | 14, Kailsh Marg |
| USR_004 | PSGR | Rudra | Agarwal | 26 | 1996-12-13 | 600042 | 5, Lohia Garden |
| USR_005 | PSGR | Rahul | Khanna | 25 | 1997-12-14 | 600067 | 1, Pink Street |
| USR_006 | PSGR | Nirmala | Seturaman | 24 | 1998-12-15 | 560105 | 3, Blue Avenue |
| USR_007 | PSGR | Smriti | Irani | 23 | 1999-12-16 | 575014 | 4, Banyan Avenue |
| USR_008 | PSGR | Ajit | Sethi | 56 | 1966-04-14 | 575001 | 6, Poes Garden |
| USR_009 | PSGR | Arjun | Allu | 55 | 1967-04-08 | 575020 | 7, Dhamaka street |
| USR_010 | PSGR | Samanta | Prabhu | 54 | 1968-04-14 | 600042 | 8, Clone Colony |
| USR_011 | PSGR | Kiran | Bedi | 53 | 1969-04-14 | 560003 | 56, Brigade Road |
| USR_012 | PSGR | Rahul | Gandhi | 52 | 1970-04-08 | 475001 | Mirza road |
| USR_013 | PSGR | Rashkit | Shetty | 51 | 1971-04-14 | 560009 | JC Road |
| USR_014 | PSGR | Rishi | Sunak | 50 | 1972-04-14 | 600034 | Anna Sali |
| USR_015 | PSGR | Vedavalli | Srinath | 49 | 1973-04-14 | 560054 | Church Street, Bangalore |
| USR_016 | PSGR | Subbu | Saravana | 48 | 1974-04-14 | 600043 | American Street |
| USR_017 | PSGR | Sheela | Dixit | 47 | 1975-04-08 | 560048 | Kasturba Road |
| USR_018 | PSGR | Margaret | Alva | 46 | 1976-04-14 | 560008 | New BEL Road |
| USR_019 | PSGR | Arun | Kumar | 45 | 1977-04-14 | 600046 | Mint Street |
| USR_020 | PSGR | Anshu | Bhardwaj | 44 | 1978-04-14 | 575001 | KSR Road |
| USR_021 | PSGR | Suma | Sampat | 43 | 1979-04-08 | 560012 | Old Airport Road, Bangalore |
| USR_022 | PSGR | Srihari | Udupa | 42 | 1980-04-14 | 560015 | Suranjan Das Road |
| USR_023 | PSGR | Satish | Kotian | 41 | 1981-04-14 | 600044 | T Nagar |
| USR_024 | PSGR | Shradha | Nayar | 40 | 1982-04-08 | 560006 | M G Road, Bangalore |
| USR_025 | PSGR | Manisha | Solanki | 39 | 1983-04-08 | 575030 | M G Road |
| USR_026 | PSGR | Bharti | Devgan | 38 | 1984-04-14 | 560059 | NAL Wind Tunnel Road |
| USR_027 | PSGR | Roopa | Ram | 37 | 1985-04-14 | 575023 | Bunder Road |
| USR_028 | PSGR | Pallavi | Ram | 36 | 1986-04-08 | 560044 | Lavelle Road |
| USR_029 | PSGR | Ravi | Naik | 35 | 1987-04-14 | 600045 | Thiru V ka Salai |
| USR_030 | PSGR | Virat | Murthy | 34 | 1988-04-14 | 575011 | Bejai New Road |
+-----+-----+-----+-----+-----+-----+-----+-----+

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