

SQL Mandatory Assignments 3

Tasks to be performed:

Create a stored procedure to display the restaurant name, type and cuisine where the table booking is not zero.

Query: Create Procedure Table_Booking

AS

Select Restaurantname,RestaurantType,CuisinesType,TableBooking
from Jomato where TableBooking != 0

GO

exec Table_Booking

The screenshot shows the SSMS interface with the following details:

- Object Explorer:** Shows the database structure under "PRITU-THAKUR\SQLEXPRESS2019 (SQL Server 15.0)". The "Stored Procedures" node is expanded, showing "System Stored Procedures" and "dbo.Table_Booking".
- SQL Query Editor:** Contains the following T-SQL code:

```
Select * from Jomato
Create Procedure Table_Booking
AS
Select Restaurantname,RestaurantType,CuisinesType,TableBooking from Jomato where TableBooking != 0
GO
exec Table_Booking
```
- Results Grid:** Displays the output of the query "Select * from Jomato". The table has columns: Restaurantname, RestaurantType, CuisinesType, and TableBooking. The data consists of 80 rows, each with a unique ID (58 to 80) and corresponding values for the other columns.

	Restaurantname	RestaurantType	CuisinesType	TableBooking
58	Baluchi - The Lalit Ashok Bang...	Fine Dining	North Indian, Kashmiri, Mughlai	1
59	Banana Beach Bar	Bar	Continental, Chinese	1
60	Bang - The Ritz-Carlton	Lounge	Finger Food	1
61	BANGALORE BOX	Casual Dining, Bar	Asian, Continental, Finger Food	1
62	Bangalore Brew Works	Microbrewery, L...	Continental, Italian	1
63	Bangalore Pub Exchange	Pub, Casual Dini...	Continental, Finger Food, Pizza, North Indian	1
64	Barjara Melting Pot	Casual Dining	North Indian, Chinese, Seafood	1
65	BAR BAR	Bar, Casual Dining	Continental, North Indian, Italian	1
66	Barbecue by Punjab Grill	Casual Dining	BBQ	1
67	Barbecued - By The Orchard	Casual Dining	North Indian	1
68	Barcode	Bar	South Indian, North Indian	1
69	Barebones - The Balcony Bar	Bar, Casual Dining	Chinese, Continental, Finger Food, Italian	1
70	Barkaa	Casual Dining	Arabian, Biryani, Desserts, Beverages, Salad	1
71	Based On A True Story- Bistro	Cafe, Quick Bites	Cafe, Burger, Italian, Desserts	1
72	Basmati Bar & Restaurant	Casual Dining	Biryani, Andhra, North Indian, Chinese	1
73	Bazaar - Zone By The Park	Casual Dining	Continental, South Indian, North Indian, Asian	1
74	Bazaar- Zon By The Park	Casual Dining	Continental, South Indian, North Indian, Asian	1
75	BBQ@52	Casual Dining	BBQ, Biryani, Continental	1
76	Beer Adda	Casual Dining, P...	North Indian, Chinese, Pizza	1
77	Beetle Juice Bar - Springs Hotel...	Bar	Finger Food	1
78	Bella	Casual Dining	Mangalorean, Seafood, South Indian	1
79	Bene - Sheraton Grand Bangal...	Fine Dining	Italian, European, Mediterranean	1
80	Bengali Fun Foods	Casual Dining	Bengali, North Indian	1

2.Create a transaction and update the cuisine type ‘Cafe’ to ‘Cafeteria’. Check the result and rollback it.

Query: Replace Café to Cafeteria

```
begin tran  
update Jomato  
set CuisinesType = Replace (CuisinesType,'Cafe','Cafeteria')  
where [CuisinesType] like '%Cafe%'
```

The screenshot shows the SQL Server Management Studio interface. In the top pane, there are two tabs: 'SQLQuery2.sql - PR...THAKUR\pritu (62))*' and 'SQLQuery1.sql - PR...THAKUR\pritu (72))*'. The code in the top pane is:

```
Create Database SQL_MandatoryAssignments_3  
Select * from dbo.Jomato  
  
Select RestaurantName, RestaurantType, CuisinesType from Jomato  
  
begin tran  
update Jomato  
set CuisinesType = Replace(CuisinesType, 'Cafe', 'Cafeteria')  
where [CuisinesType] like '%Cafe%'
```

In the bottom pane, the 'Results' tab is selected. The output shows a table with columns: RestaurantName, RestaurantType, and CuisinesType. The data includes rows where the CuisinesType has been updated from 'Cafe' to 'Cafeteria'.

	RestaurantName	RestaurantType	CuisinesType
1	L-81 Cafe	Quick Bites	Fast Food, Beverages
2	refuel	Cafe	Cafeteria, Beverages
3	Biryani Central	Casual Dining	Biryani, Mughlai, Chinese
4	The Bbq	Casual Dining	BBQ, Continental, North Indian, Chinese, Beverages
5	The Bbq	Takeaway, Delivery	Mughlai, Biryani, Chinese, North Indian
6	Italy	Casual Dining	Italian
7	North Parontha Hut	Takeaway, Delivery	North Indian
8	1000 B.C	Quick Bites	Arabian, Sandwich, Rolls, Burger
9	1Q1	Casual Dining	Biryani, North Indian
10	11 to 11 Express Biryianis	Quick Bites	Biryani, Kebab
11	1131 Bar + Kitchen	Bar, Casual Dining	Continental, Asian, Italian, North Indian
12	12th Main - Grand Mercure	Fine Dining	European, Asian
13	1441 Pizzeria	Casual Dining	Pizza, Salad
14	1522 - The Pub	Pub	Chinese, Continental, North Indian
15	154 Breakfast Club	Cafe	Cafeteria, Continental
16	1722 Urban Bistro	Casual Dining	North Indian, Chinese, Fast Food, Biryani
17	18+ Ice Cafe	Cafe	Cafeteria, Fast Food, Chinese, Beverages
18	States	Casual Dining	North Indian, Chinese, Continental
19	1980s Games Cafe	Cafe	Cafeteria, Fast Food
20	1992 Chats - Space	Quick Bites	Street Food
21	1Q1	Casual Dining, Bar	Asian, Japanese, Thai, Malaysian, Vietnamese, Ko...
22	1TO3 Kitchen	Delivery	North Indian, Chinese, Continental, Italian, South I...
23	2 Statez	Casual Dining	Kerala, Seafood, South Indian, North Indian, Chin...
24	20 Char - Sterlings MAC ...	Casual Dining, Bar	Chinese, Continental, North Indian, South Indian, ...
25	20 Feet High	Casual Dining, Bar	American, Continental, Steak, Salad

Query: Rollback the result

```
begin tran  
update Jomato  
set CuisinesType = Replace(CuisinesType,'Cafe','Cafeteria')  
where [CuisinesType] like '%Cafe%'  
Rollback
```

The screenshot shows a SQL Server Management Studio window with two tabs: 'SQLQuery2.sql - PR...THAKUR\pritu (62)*' and 'SQLQuery1.sql - PR...THAKUR\pritu (72)*'. The code in the first tab is:

```
Select RestaurantName, RestaurantType, CuisinesType from Jomato  
  
begin tran  
update Jomato  
set CuisinesType = Replace(CuisinesType, 'Cafe', 'Cafeteria')  
where [CuisinesType] like '%Cafe%'  
  
Rollback
```

The 'Messages' tab at the bottom displays the results of the execution:

```
121 % 121 %  
Messages  
  
(519 rows affected)  
Completion time: 2024-12-06T12:33:38.0317781-06:00
```

Query: To check the result

```
Select RestaurantName, RestaurantType, CuisinesType from Jomato
```

SQLQuery2.sql - PR...THAKUR\pritu (62)* → X SQLQuery1.sql - PR...THAKUR\pritu (72)*

```
Select RestaurantName, RestaurantType, CuisinesType from Jomato
```

Results Messages

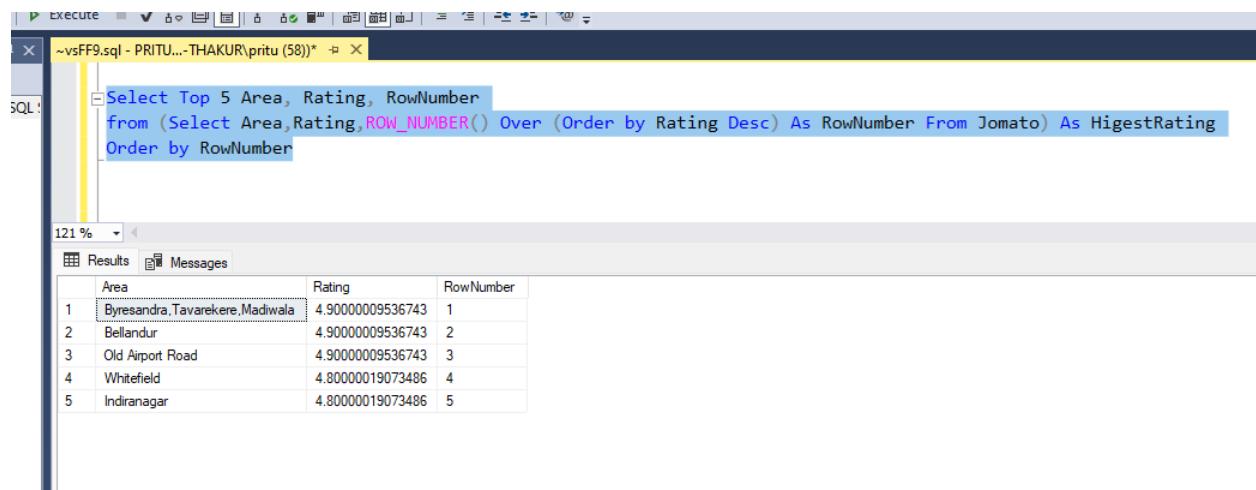
	RestaurantName	RestaurantType	CuisinesType
1	L-81 Cafe	Quick Bites	Fast Food, Beverages
2	refuel	Cafe	Cafe, Beverages
3	Biryani Central	Casual Dining	Biryani, Mughlai, Chinese
4	The Bbq	Casual Dining	BBQ, Continental, North Indian, Chinese, Beverages
5	The Bbq	Takeaway, Delivery	Mughlai, Biryani, Chinese, North Indian
6	Italy	Casual Dining	Italian
7	North Parontha Hut	Takeaway, Delivery	North Indian
8	1000 B.C	Quick Bites	Arabian, Sandwich, Rolls, Burger
9	1Q1	Casual Dining	Biryani, North Indian
10	11 to 11 Express Biryani	Quick Bites	Biryani, Kebab
11	1131 Bar + Kitchen	Bar, Casual Dining	Continental, Asian, Italian, North Indian
12	12th Main - Grand Mercure	Fine Dining	European, Asian
13	1441 Pizzeria	Casual Dining	Pizza, Salad
14	1522 - The Pub	Pub	Chinese, Continental, North Indian
15	154 Breakfast Club	Cafe	Cafe, Continental
16	1722 Urban Bistro	Casual Dining	North Indian, Chinese, Fast Food, Biryani
17	18+ Ice Cafe	Cafe	Cafe, Fast Food, Chinese, Beverages
18	States	Casual Dining	North Indian, Chinese, Continental
19	1980s Games Cafe	Cafe	Cafe, Fast Food
20	1992 Chats - Space	Quick Bites	Street Food
21	1Q1	Casual Dining, Bar	Asian, Japanese, Thai, Malaysian, Vietnamese, Ko...
22	1TO3 Kitchen	Delivery	North Indian, Chinese, Continental, Italian, South I...
23	2 Statez	Casual Dining	Kerala, Seafood, South Indian, North Indian, Chine...
24	20 Char - Sterlings MAC Hotel	Casual Dining, Bar	Chinese, Continental, North Indian, South Indian, ...
25	20 Feet High	Casual Dining, Bar	American, Continental, Steak, Salad
26	21 C - La Marvella Sarovar Premiere Hotel	Casual Dining	Continental
27	24 Carats - The Capitol	Casual Dining	Asian, Continental
28	24 Hours Cake Delivery	Delivery	Bakery
29	24 Hours Coffee Drop - La Classic	Cafe	Cafe
30	247 The Lala Dhaba	Quick Bites	Continental, Indian, Chinese, ...

3. Generate a row number column and find the top 5 areas with the highest rating of restaurants.

Query: Select Top 5 Area, Rating, RowNumber

```
from (Select Area,Rating,ROW_NUMBER() Over (Order by Rating Desc)
As RowNumber From Jomato) As HigestRating
```

```
Order by RowNumber
```



The screenshot shows a SQL Server Management Studio window. The query is executed in a query editor window titled 'vsFF9.sql - PRITU...-THAKUR\pritu (58)*'. The query itself is:

```
Select Top 5 Area, Rating, RowNumber
from (Select Area,Rating,ROW_NUMBER() Over (Order by Rating Desc) As RowNumber From Jomato) As HigestRating
Order by RowNumber
```

The results are displayed in a table titled 'Results' under the 'Messages' tab. The table has three columns: 'Area', 'Rating', and 'RowNumber'. The data is as follows:

	Area	Rating	RowNumber
1	Byresandra,Tavarekere,Madivala	4.90000009536743	1
2	Bellandur	4.90000009536743	2
3	Old Airport Road	4.90000009536743	3
4	Whitefield	4.80000019073486	4
5	Indiranagar	4.80000019073486	5

4. Use the while loop to display the 1 to 50.

Query: Declare @OrderId Int

```
Set @OrderId = 1
```

```
While @OrderId<= 50
```

```
Begin
```

```
Select OrderID,RestaurantName,CuisinesType from Jomato
```

```
where OrderID = @OrderId
```

```
SET @OrderId = @OrderId + 1
```

```
End
```

```
~vsFF9.sql - PRITU...-THAKUR\pritu (58)* ↗ ×
```

```
Declare @OrderId Int
Set @OrderId = 1
While @OrderId <= 50
Begin
    Select OrderID, RestaurantName, CuisinesType from Jomato
    where OrderID = @OrderId
    SET @OrderId = @OrderId + 1
End
```

121 %

Results Messages

	OrderID	RestaurantName	CuisinesType
1	1	L-81 Cafe	Fast Food, Beverages
1	2	refuel	Cafe, Beverages
1	3	Biryani Central	Biryani, Mughlai, Chinese
1	4	The Bbq	BBQ, Continental, North Indian, Chinese, Beverages
1	5	The Bbq	Mughlai, Biryani, Chinese, North Indian
1	6	Italy	Italian
1	7	North Parontha Hut	North Indian
1	8	1000 B.C	Arabian, Sandwich, Rolls, Burger
1	9	1Q1	Biryani, North Indian
1	10	11 to 11 Express Biriyanis	Biryani, Kebab
1	11	1131 Bar + Kitchen	Continental, Asian, Italian, North Indian
1	12	12th Main - Grand Mercure	European, Asian
1	13	1441 Pizzeria	Pizza, Salad
1	14	1522 - The Pub	Chinese, Continental, North Indian

```

Declare @OrderId Int
Set @OrderId = 1
While @OrderId <= 50
Begin
    Select OrderID, RestaurantName, CuisinesType from Jomato
    where OrderID = @OrderId
    SET @OrderId = @OrderId + 1

```

121 %

Results Messages

	OrderID	RestaurantName	CuisinesType
1	37	3 Spice	North Indian, Chinese
1	38	30 Square	Tibetan, Nepalese, Momos
1	39	360 Atoms Restaurant And Cafe	Cafe, Chinese, Continental, Italian
1	40	36th Cross Coffee Mane	North Indian, Chinese
1	41	37 China Town	Chinese, Thai, North Indian, South Indian, Conti...
1	42	3B's - Buddies, Bar & Barbecues	North Indian, Mediterranean, European, BBQ
1	43	3G's - Gulp & Groove	Finger Food, Continental, Chinese
1	44	3rd Innings	Burger, Italian, North Indian, Chinese
1	45	4 Mangoes	Ice Cream
1	46	4 Seasons Restaurant	North Indian, Seafood, Middle Eastern, Chinese
1	47	4 States	South Indian
1	48	46 Ounces Brewgarden	Bar Food, Finger Food, Pizza
1	49	4700BC Popcom	Fast Food
1	50	4Foodiez	South Indian, North Indian, Chinese

5. Write a query to Create a Top rating view to store the generated top 5 highest rating of restaurants.

Query: Create View Top_Rating

AS

Select Top 5 Restaurantname, Area, Rating from Jomato

Order By Rating desc;

Select * from Top_Rating

The screenshot shows a SQL editor window with the following content:

```
~vsFF9.sql - PRITU...-THAKUR\pritu (58)* ✎ X
Create View Top_Rating
As
Select Top 5 Restaurantname, Area, Rating from Jomato
Order By Rating desc;

Select * from Top_Rating

121 %  ↴
Messages
Commands completed successfully.

Completion time: 2024-12-09T12:04:30.2101165-06:00
```

The code in the editor is:

```
Create View Top_Rating
As
Select Top 5 Restaurantname, Area, Rating from Jomato
Order By Rating desc;

Select * from Top_Rating
```

The output pane shows:

- Messages: Commands completed successfully.
- Completion time: 2024-12-09T12:04:30.2101165-06:00

The screenshot shows a SQL Server Management Studio window. The query pane contains the following T-SQL code:

```
~vsFF9.sql - PRITU...-THAKUR\pritu (58)* X
Create View Top_Rating
AS
Select Top 5 Restaurantname, Area, Rating from Jomato
Order By Rating desc;

Select * from Top_Rating
```

The results pane displays a table with five rows of data:

	Restaurantname	Area	Rating
1	Asia Kitchen By Mainland China	Byresandra,Tavarekere,Madiwala	4.90000009536743
2	Byg Brewski Brewing Company	Bellandur	4.90000009536743
3	Sant?de?ed??ede??d??ede?ed???de??d??ede?ed??ede?...	Old Airport Road	4.90000009536743
4	Belgian Waffle Factory	Byresandra,Tavarekere,Madiwala	4.80000019073486
5	O.G. Variar & Sons	Malleshwaram	4.80000019073486

6. Write a trigger that sends an email notification to restaurant owner whenever a new record is inserted.(2 Solutions as per updated assignment)

Query: For Sending Email Notification

```
CREATE TRIGGER trg_Jomato_Insert
ON Jomato
AFTER INSERT
AS
BEGIN
    DECLARE @RestaurantName NVARCHAR(255);
    DECLARE @ClientEmail NVARCHAR(255);
```

```
DECLARE @Message NVARCHAR(MAX);

SELECT
    @RestaurantName = RestaurantName,
    @OwnerEmail = 'prituirving1191@gmail.com' -- owner email
    coulmn is not there so hardcoding email
    FROM INSERTED;

SET @Message ='A new record has been added to the Jomato system
for your restaurant: ' + @RestaurantName + '.' + CHAR(13) + CHAR(10) +
    'Please log in to verify the details.';

EXEC msdb.dbo.sp_send_dbmail
    @profile_name = 'SQLServerMailAccount',
    @recipients = @ ClientEmail,
    @subject = 'New Record Inserted in Jomato',
    @body = @Message;

END;
```

```
Insert into Jomato values (7105,'The
Bbq','FineDinning',4.8,80,1000,3,3,'NorthIndian','Shaikpet','hyderabad',
45)
```

```

SQLQuery2.sql - PR...THAKUR\pritu (51)* SQLQuery1.sql - PR...THAKUR\pritu (62)* □ X
CREATE TRIGGER trg_Jomato_Insert
ON Jomato
AFTER INSERT
AS
BEGIN
    DECLARE @RestaurantName NVARCHAR(255);
    DECLARE @OwnerEmail NVARCHAR(255);
    DECLARE @Message NVARCHAR(MAX);

    SELECT
        @RestaurantName = RestaurantName,
        @OwnerEmail = 'prituirving1191@gmail.com' -- owner email coulumn is not there so hardcoding email
    FROM INSERTED;

    SET @Message = 'A new record has been added to the Jomato system for your restaurant: ' + @RestaurantName + '.' + CHAR(13) + CHAR(10) +
                   'Please log in to verify the details.';

    EXEC msdb.dbo.sp_send_dbmail
        @profile_name = 'DefaultMailProfile',
        @recipients = @OwnerEmail,
        @subject = 'New Record Inserted in Jomato',
        @body = @Message;
END;
Insert into Jomato values (7105,'PunjabiTadka','FineDinning',4.8,80,1000,3,3,'NorthIndian','Shaikpet','hyderabad',45)

```

124 %

Messages

Mail (Id: 1) queued.

(1 row affected)

Completion time: 2024-12-09T15:08:16.3622846-06:00

```

SQLQuery2.sql - PR...THAKUR\pritu (51)* SQLQuery1.sql - PR...THAKUR\pritu (62)* □ X
SELECT
    mailitem_id,
    profile_id,
    recipients,
    subject,
    body,
    sent_status,
    sent_date,
    last_mod_date
FROM sysmail_allitems
ORDER BY last_mod_date DESC;

SELECT
    log_date,
    log_type,
    mailitem_id,
    description

```

124 %

Results

	mailitem_id	profile_id	recipients	subject	body	sent_status	sent_date	last_mod_date
1	1	1	prituirving1191@gmail.com	New Record Inserted in Jomato	A new record has been added to the Jomato syste...	failed	2024-12-09 15:08:17.000	2024-12-09 15:08:17.600

Alternate Solution When Trigger Message is sent for Any Insert operation:

1.Create Log Table

```
CREATE TABLE [dbo].[Logs]([OperationName] varchar(70) NULL,  
[Timestamp] datetime NULL)
```

```
CREATE TRIGGER trg_Jomato_Insert
```

```
ON Jomato FOR INSERT
```

```
AS
```

```
Begin
```

```
insert into Logs values ('Insert-Operation', getdate())
```

```
End;
```

```
Insert into Jomato values (7106,'The  
Barbeque','FineDinning',4.8,89,1500,3,3,'NorthIndian','Shaikpet','hyder  
abad',40)
```

```
Select * from Jomato where OrderId =7106
```

```
Select * from Logs
```

```
SQLQuery2.sql - PR...THAKUR\pritu (64)* + X SQLQuery1.sql - PR...THAKUR\pritu (55)*
CREATE TABLE [dbo].[Logs](
    [OperationName] varchar(70) NULL,
    [Timestamp] datetime NULL
)
CREATE TRIGGER trg_Jomato_Insert
ON Jomato
FOR INSERT
AS
Begin
    insert into Logs values ('Insert-Operation', getdate())
End
Insert into Jomato values (7106,'The Barbeque','FineDinning',4.8,89,1500,3,3,'NorthIndian','Shaikpet','hyderabad',40)
Select * from Jomato where OrderId =7106
Select * from Logs
```

123 %

	OrderId	RestaurantName	RestaurantType	Rating	No_of_Rating	AverageCost	OnlineOrder	TableBooking	CuisinesType	Area	LocalAddress	Delivery_time
1	7106	The Barbeque	FineDinning	4.8	89	1500	1	1	NorthIndian	Shaikpet	hyderabad	40

	OperationName	Timestamp
1	Insert-Operation	2024-12-11 17:52:10.900