

# Data Analysis for online food delivery platform using SQL

## 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 for "PRITU-THAKUR\SQLEXPRESS2019 (SQL Server 15.0)". It includes nodes for Databases, Tables, Views, External Resources, Synonyms, Programmability, and System Stored Procedures.
- 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 executed query. The columns are Restaurantname, RestaurantType, CuisinesType, and TableBooking. The data consists of 80 rows of restaurant information, all showing a TableBooking value of 1.

Restaurantname	RestaurantType	CuisinesType	TableBooking
Baluchi - The Lali Ashok Bang...	Fine Dining	North Indian, Kashmiri, Mughlai	1
Banana Beach Bar	Bar	Continental, Chinese	1
Bang - The Ritz-Carlton	Lounge	Finger Food	1
BANGALORE BOX	Casual Dining, Bar	Asian, Continental, Finger Food	1
Bangalore Brew Works	Microbrewery, L...	Continental, Italian	1
Bangalore Pub Exchange	Pub, Casual Dini...	Continental, Finger Food, Pizza, North Indian	1
Barjara Melting Pot	Casual Dining	North Indian, Chinese, Seafood	1
BAR BAR	Bar, Casual Dining	Continental, North Indian, Italian	1
Barbecue by Punjab Grill	Casual Dining	BBQ	1
Barbecued - By The Orchard	Casual Dining	North Indian	1
Barcode	Bar	South Indian, North Indian	1
Barebones - The Balcony Bar	Bar, Casual Dining	Chinese, Continental, Finger Food, Italian	1
Barkas	Casual Dining	Arabian, Biryani, Desserts, Beverages, Salad	1
Based On A True Story- Bistro	Cafe, Quick Bites	Cafe, Burger, Italian, Desserts	1
Basmati Bar & Restaurant	Casual Dining	Biryani, Andhra, North Indian, Chinese	1
Bazaar - Zone By The Park	Casual Dining	Continental, South Indian, North Indian, Asian	1
Bazaar-Zone By The Park	Casual Dining	Continental, South Indian, North Indian, Asian	1
BBQ@52	Casual Dining	BBQ, Biryani, Continental	1
Beer Adda	Casual Dining, P...	North Indian, Chinese, Pizza	1
Beetle Juice Bar - Springs Hotel...	Bar	Finger Food	1
Bella	Casual Dining	Mangalorean, Seafood, South Indian	1
Bene - Sheraton Grand Bangal...	Fine Dining	Italian, European, Mediterranean	1
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, there is a 'Results' tab. The results grid displays data from the 'Jomato' table. The columns are 'RestaurantName', 'RestaurantType', and 'CuisinesType'. The 'CuisinesType' column shows the replacement of 'Cafe' with 'Cafeteria' for rows where 'CuisinesType' contains '%Cafe%'. The data is as follows:

	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
```

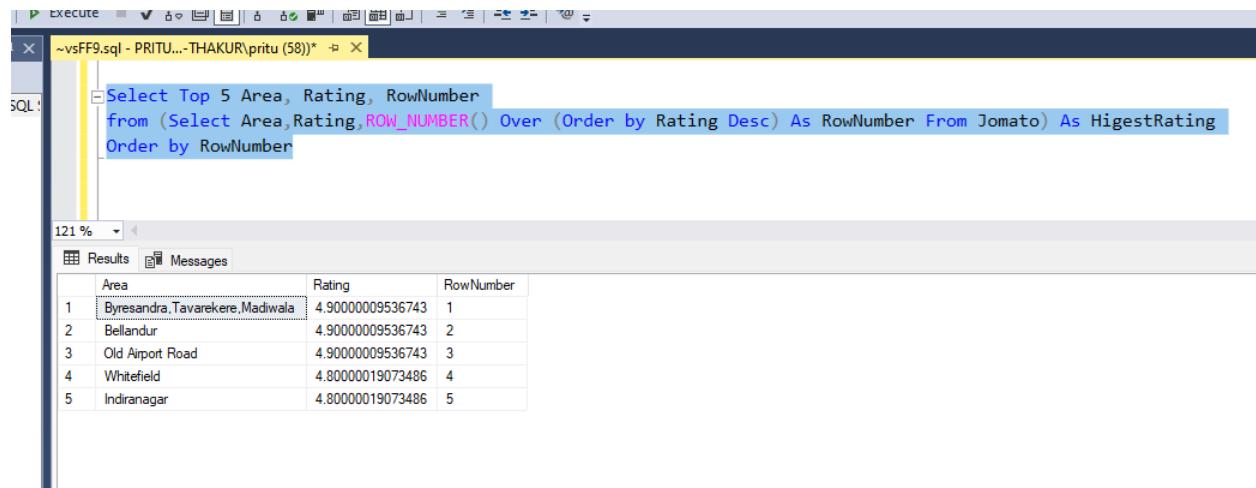
Results Messages

	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 Laundry	Fast Food	Continental, Indian, Italian, 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 with the following details:

- Query Editor:** The code is displayed in the editor:

```
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
```

- Results Tab:** The results show a table with 5 rows, ordered by RowNumber:

	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 Biryanis	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 (SSMS) interface. In the top window, a query is being run:

```
~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 below displays the output of the query:

	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 column 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