

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 displays the SQL Server Enterprise Manager interface. On the left, the Object Explorer shows the database structure for 'PRITU-THAKUR\SQLEXPRESS2019 (SQL Server 15.0)'. The 'Stored Procedures' folder is expanded, showing 'dbo.Table_Booking'. The main window shows the SQL query editor with the following code:

```
select * from Jomato

Create Procedure Table_Booking
AS
Select Restaurantname,RestaurantType,CuisinesType,TableBooking from Jomato where TableBooking != 0
GO

exec Table_Booking
```

The Results pane at the bottom shows the output of the query, displaying a table with 4 columns: Restaurantname, RestaurantType, CuisinesType, and TableBooking. The table contains 20 rows of data, with the first row being the header and the subsequent rows representing individual restaurants and their details.

	Restaurantname	RestaurantType	CuisinesType	TableBooking
58	Baluchi - The Lalit Aahok 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	Banjara 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	Barkaas	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- Zone 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%'

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

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%'

121 %

Results Messages

	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 Parantha 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	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**

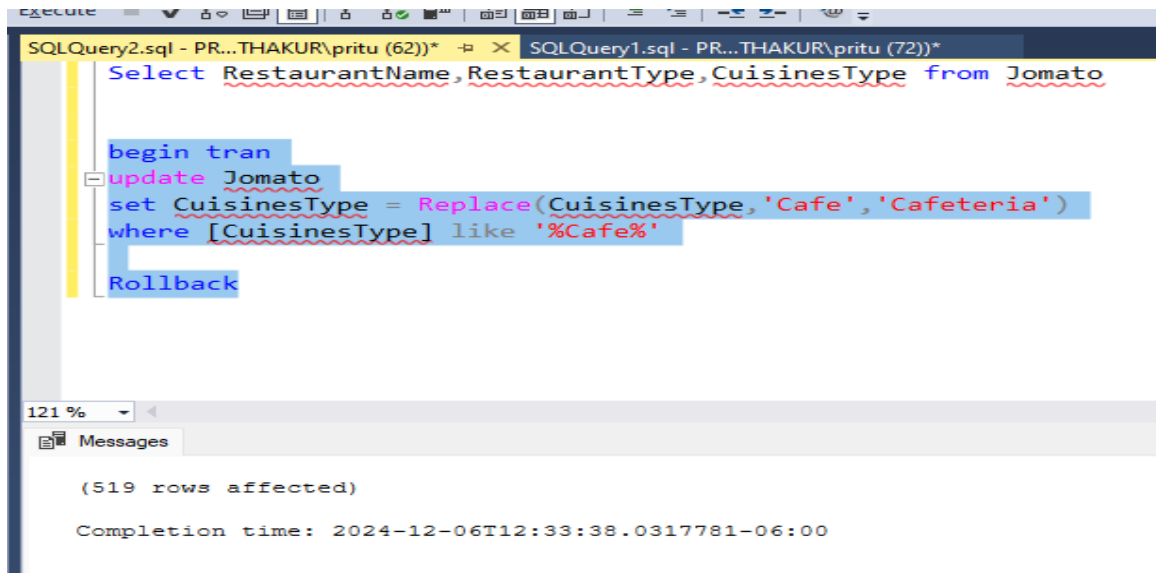
begin tran

update Jomato

set CuisinesType = Replace(CuisinesType,'Cafe','Cafeteria')

where [CuisinesType] like '%Cafe%'

Rollback



The screenshot shows a SQL Server Enterprise Manager interface. At the top, there are two tabs: 'SQLQuery2.sql - PR...THAKUR\pritu (62))' and 'SQLQuery1.sql - PR...THAKUR\pritu (72))'. The active window displays a SQL query:
`Select RestaurantName, RestaurantType, CuisinesType from Jomato`
`begin tran`
`update Jomato`
`set CuisinesType = Replace(CuisinesType, 'Cafe', 'Cafeteria')`
`where [CuisinesType] like '%Cafe%'`
`Rollback`
Below the query window, there is a 'Messages' pane. It shows the message:
(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))* SQLQuery1.sql - PR...THAKUR\pritu (72))*

QL :

2

3

Select RestaurantName, RestaurantType, CuisinesType from Jomato

121 %

Results Messages

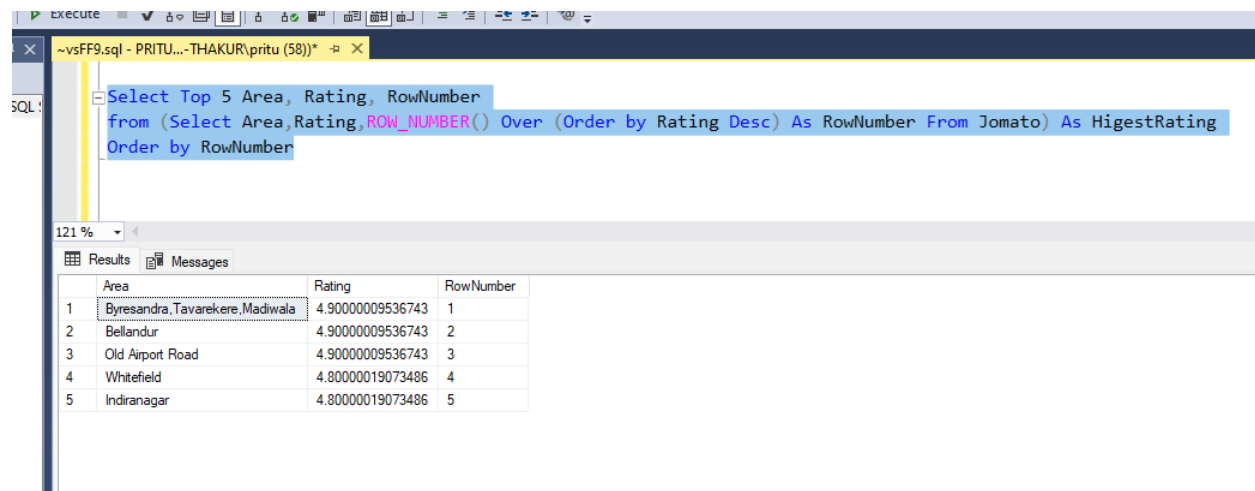
	RestaurantName	RestaurantType	CuisinesType
1	L-81 Cafe	Quick Bites	Fast Food, Beverages
2	refuel	Cafe	Cafe, Beverages
3	Biryani Central	Casual Dining	Biryani, Mughlai, Chinese
4	The Bbq	Casual Dining	BBQ, Continental, North Indian, Chinese, Beverages
5	The Bbq	Takeaway, Delivery	Mughlai, Biryani, Chinese, North Indian
6	Italy	Casual Dining	Italian
7	North Parantha 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

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 query execution window with the following 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 results are displayed in a table with the following columns: Area, Rating, and RowNumber.

	Area	Rating	RowNumber
1	Byresandra, Tavarekere, Madiwala	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 Parantha Hut	North Indian
1	8	1000 B.C	Arabian, Sandwich, Rolls, Burger
1	9	1Q1	Biryani, North Indian
1	10	11 to 11 Express Biryani	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.

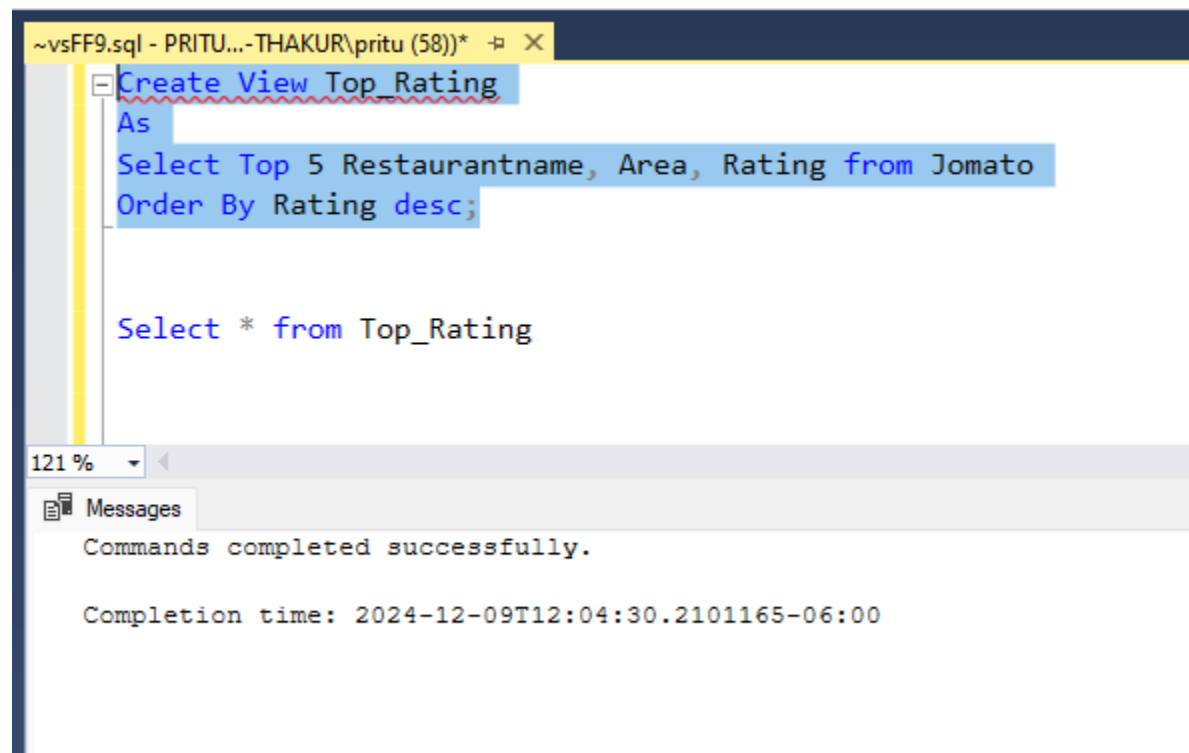
Query: Create View Top_Rating

AS

Select Top 5 Restaurantname, Area, Rating from Jomato

Order By Rating desc;

Select * from Top_Rating



The screenshot shows a SQL query 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
```

Below the query editor, there is a Messages pane showing the execution results:

```
121 %  
Messages  
Commands completed successfully.  
  
Completion time: 2024-12-09T12:04:30.2101165-06:00
```


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

```

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

Select * from Top_Rating

```

121 %

Results Messages

	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
    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 = '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))"
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 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 = '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))"
FROM sysmail_profile;

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 Messages

mailitem_id	profile_id	recipients	subject	body	sent_status	sent_date	last_mod_date
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))*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 %

ResultsMessages

	OrderId	RestaurantName	Restaurant Type	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