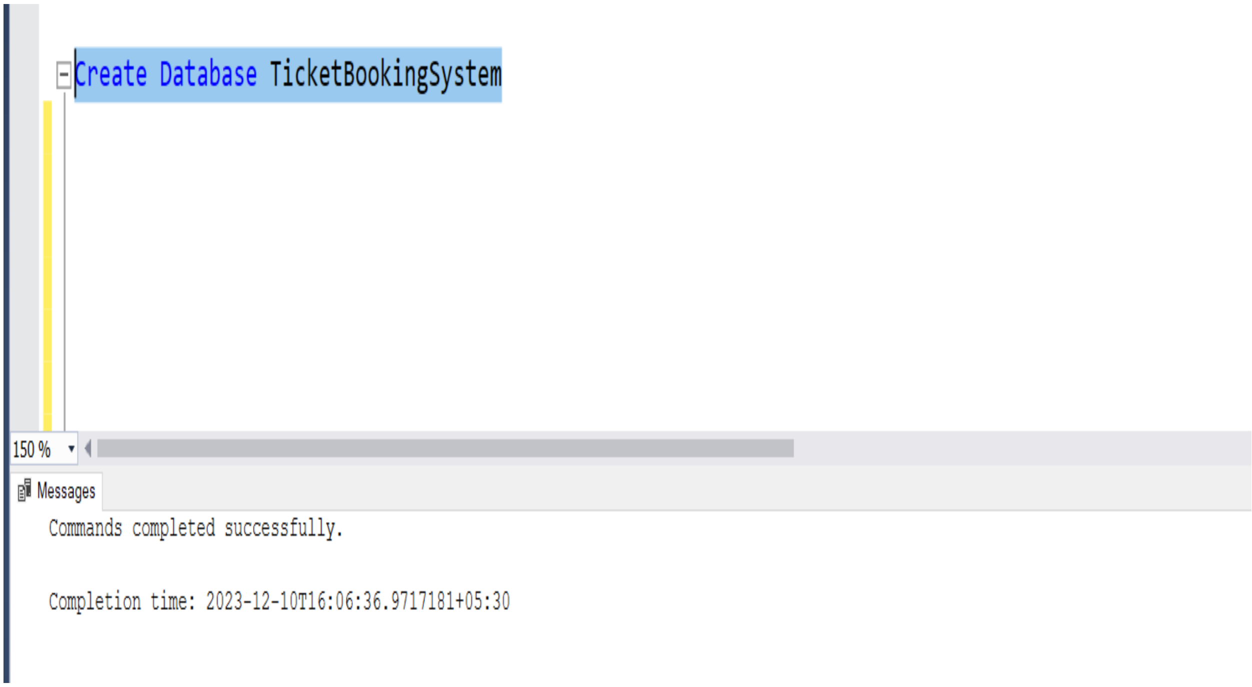
Assignment 5-Ticket Booking System

---------------------------Task 1: Database Design ---------------------------

1. Create the database named "TicketBookingSystem"

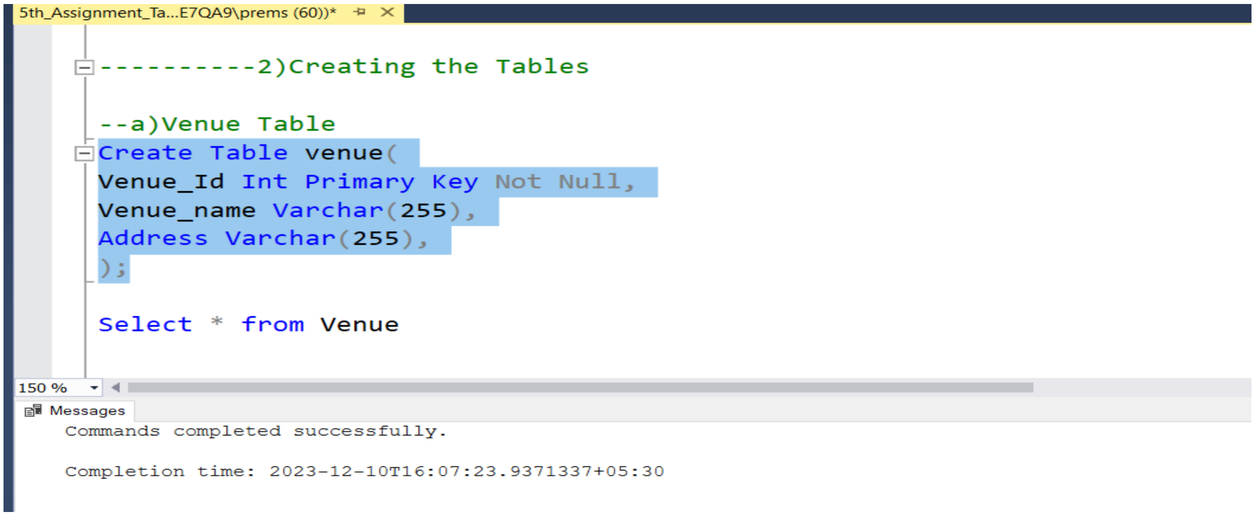


```
Create Database TicketBookingSystem
```

```
Commands completed successfully.

Completion time: 2023-12-10T16:06:36.9717181+05:30
```

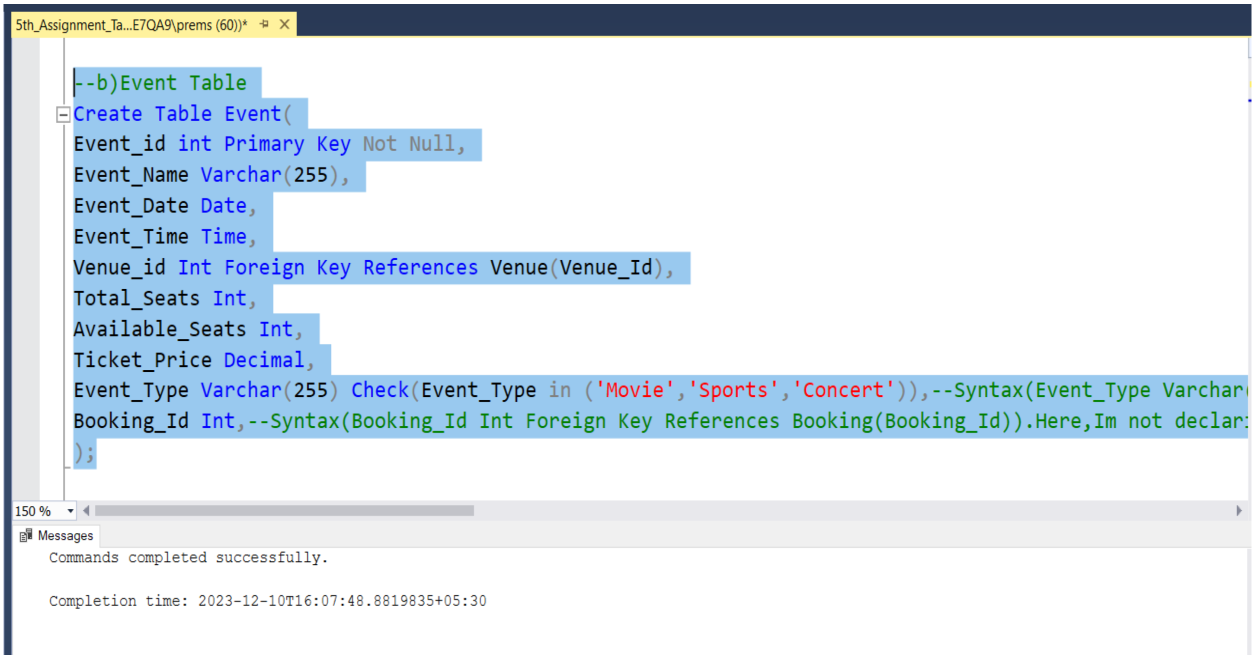
2) Write SQL scripts to create the mentioned tables with appropriate data types, constraints, and relationships.

• Venu • Event • Customers • Booking



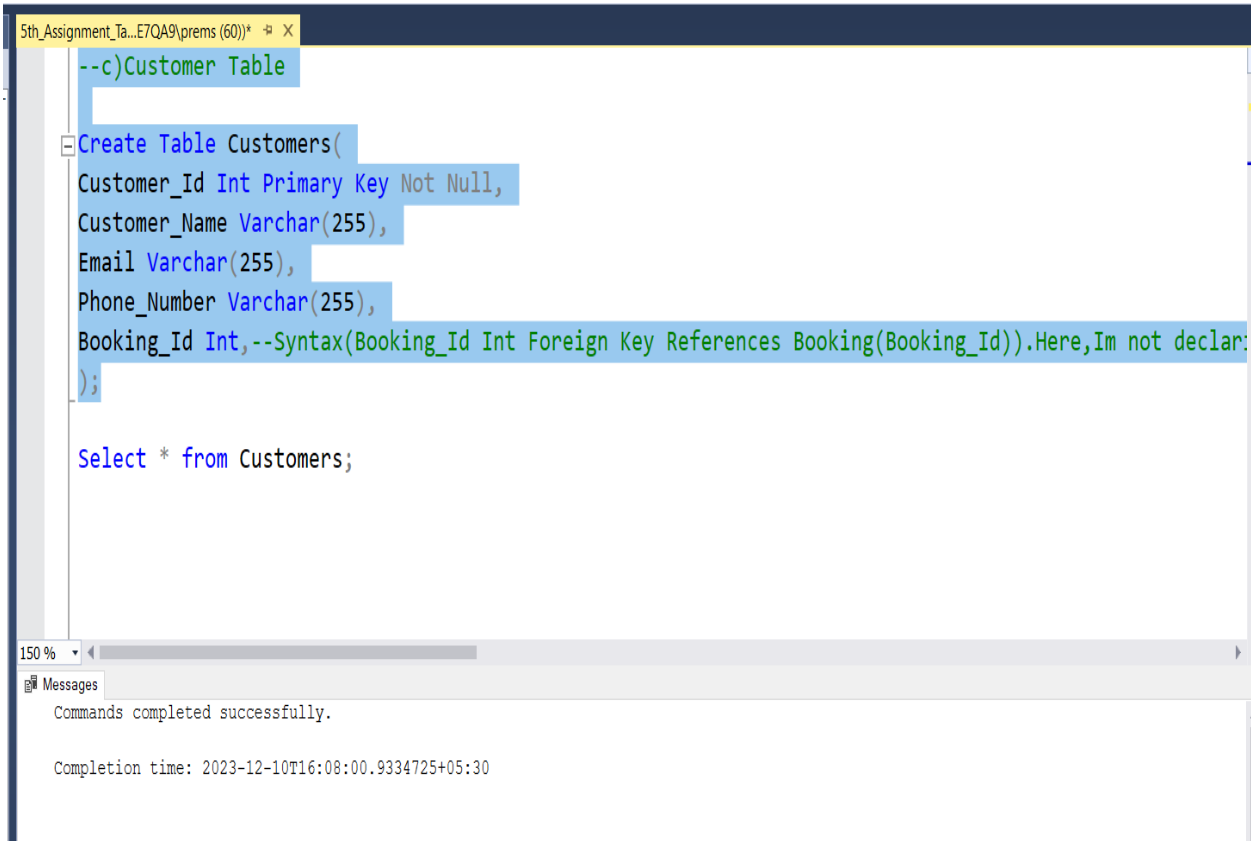
```
----------2)Creating the Tables

--a)Venue Table
Create Table venue(
Venue_Id Int Primary Key Not Null,
Venue_name Varchar(255),
Address Varchar(255),
);

Select * from Venue
```

```
Commands completed successfully.

Completion time: 2023-12-10T16:07:23.9371337+05:30
```



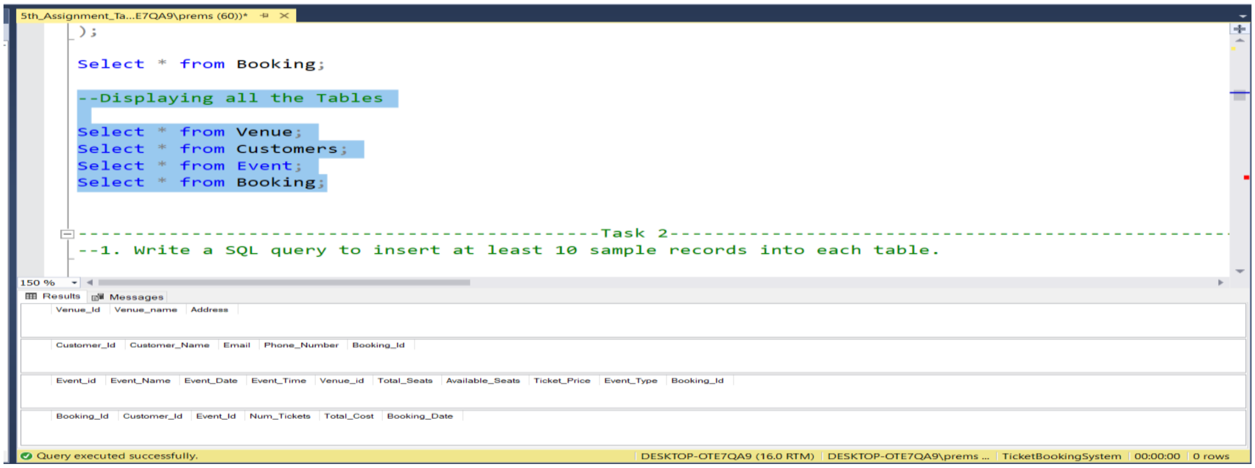
```
--b)Event Table
Create Table Event(
Event_id int Primary Key Not Null,
Event_Name Varchar(255),
Event_Date Date,
Event_Time Time,
Venue_id Int Foreign Key References Venue(Venue_Id),
Total_Seats Int,
Available_Seats Int,
Ticket_Price Decimal,
Event_Type Varchar(255) Check(Event_Type in ('Movie','Sports','Concert')),--Syntax(Event_Type Varchar(
Booking_Id Int,--Syntax(Booking_Id Int Foreign Key References Booking(Booking_Id)).Here,Im not declar
);
```

```
Commands completed successfully.

Completion time: 2023-12-10T16:07:48.8819835+05:30
```



```
--c)Customer Table

Create Table Customers(
Customer_Id Int Primary Key Not Null,
Customer_Name Varchar(255),
Email Varchar(255),
Phone_Number Varchar(255),
Booking_Id Int,--Syntax(Booking_Id Int Foreign Key References Booking(Booking_Id)).Here,Im not declar
);

Select * from Customers;
```

```
Commands completed successfully.

Completion time: 2023-12-10T16:08:00.9334725+05:30
```



```
);

Select * from Booking;

--Displaying all the Tables

Select * from Venue;
Select * from Customers;
Select * from Event;
Select * from Booking;


---------------------------------------------Task 2-----------------------------------------------
--1. Write a SQL query to insert at least 10 sample records into each table.
```

Venue_Id	Venue_name	Address

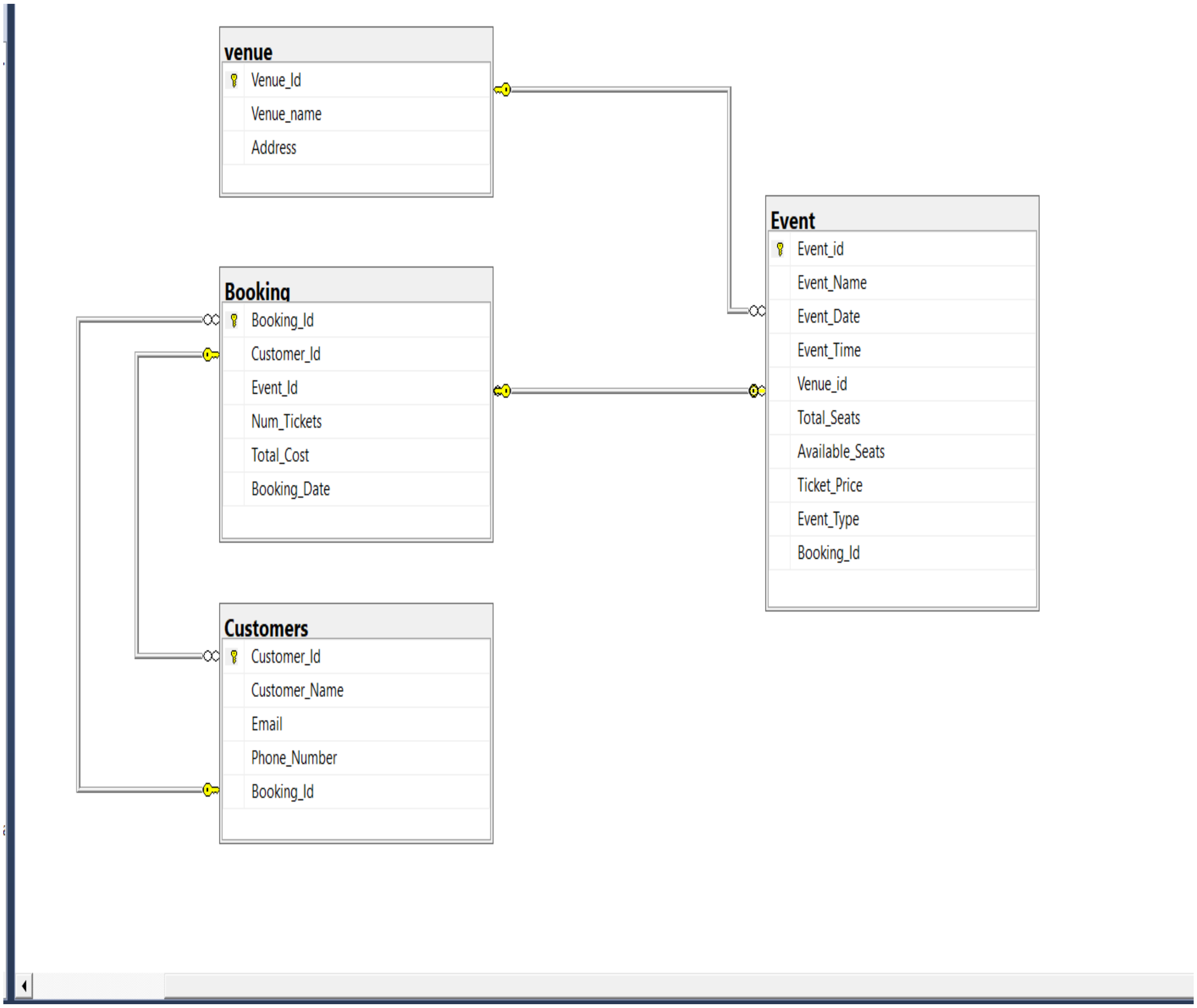
Customer_Id	Customer_Name	Email	Phone_Number	Booking_Id

Event_id	Event_Name	Event_Date	Event_Time	Venue_id	Total_Seats	Available_Seats	Ticket_Price	Event_Type	Booking_Id

Booking_Id	Customer_Id	Event_Id	Num_Tickets	Total_Cost	Booking_Date

Query executed successfully. | DESKTOP-OTE7QA9 (16.0 RTM) | DESKTOP-OTE7QA9\prems ... | TicketBookingSystem | 00:00:00 | 0 rows

3. Create an ERD (Entity Relationship Diagram) for the database.



venue
- Venue_Id
- Venue_name
- Address

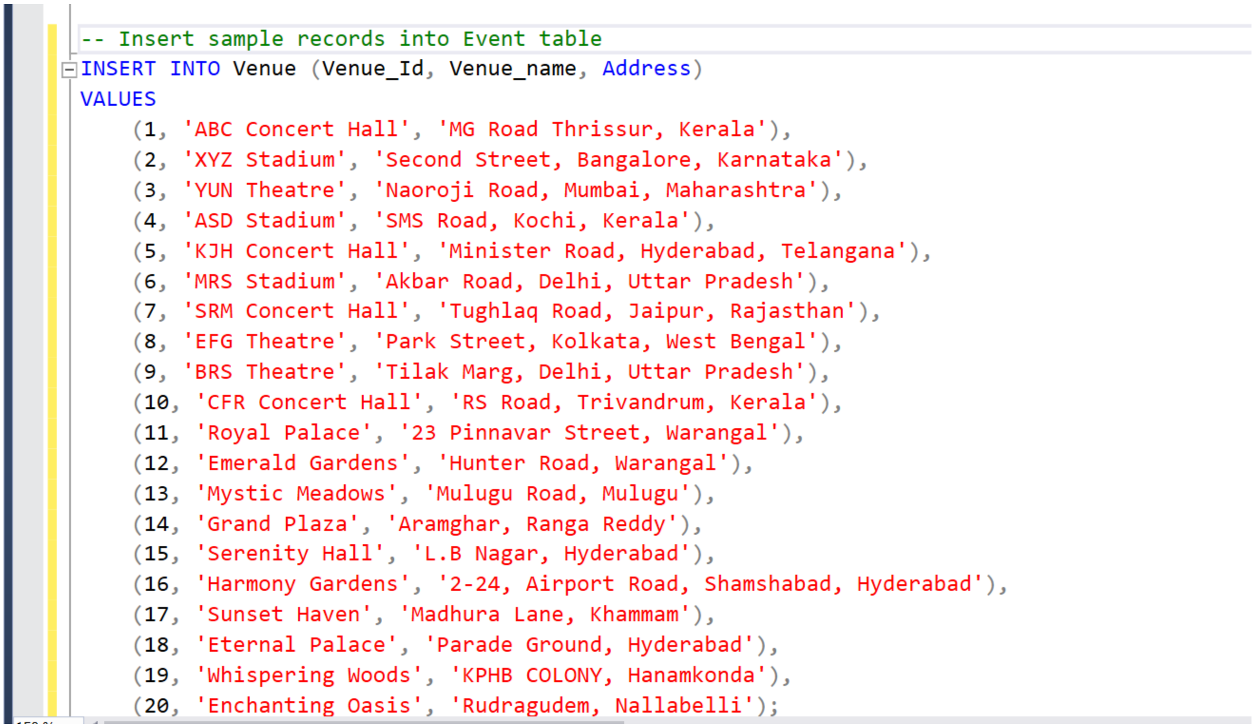
Booking
- Booking_Id
- Customer_Id
- Event_Id
- Num_Tickets
- Total_Cost
- Booking_Date

Customers
- Customer_Id
- Customer_Name
- Email
- Phone_Number
- Booking_Id

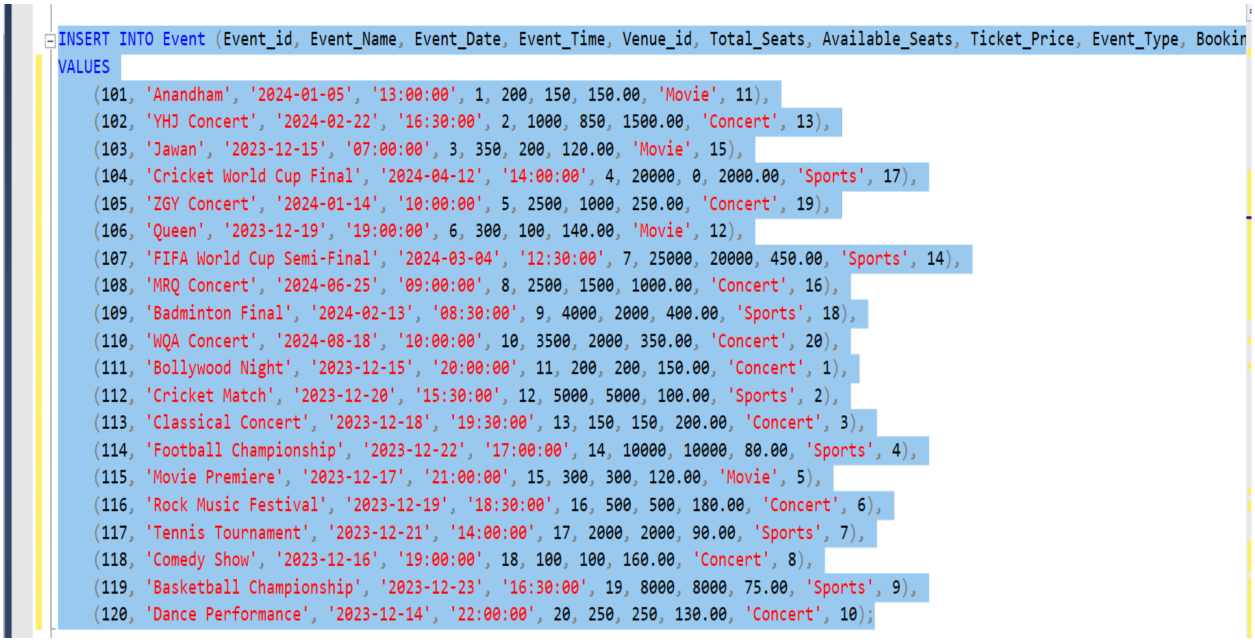
Event
- Event_id
- Event_Name
- Event_Date
- Event_Time
- Venue_id
- Total_Seats
- Available_Seats
- Ticket_Price
- Event_Type
- Booking_Id

------------------Tasks 2: Select, Where, Between, AND, LIKE: ------------

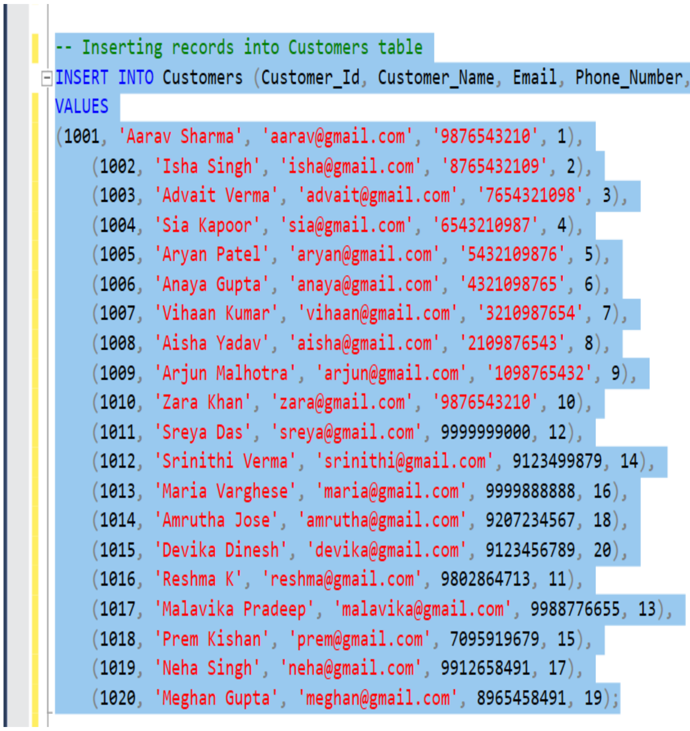
4)Write a SQL query to insert at least 10 sample records into each table.



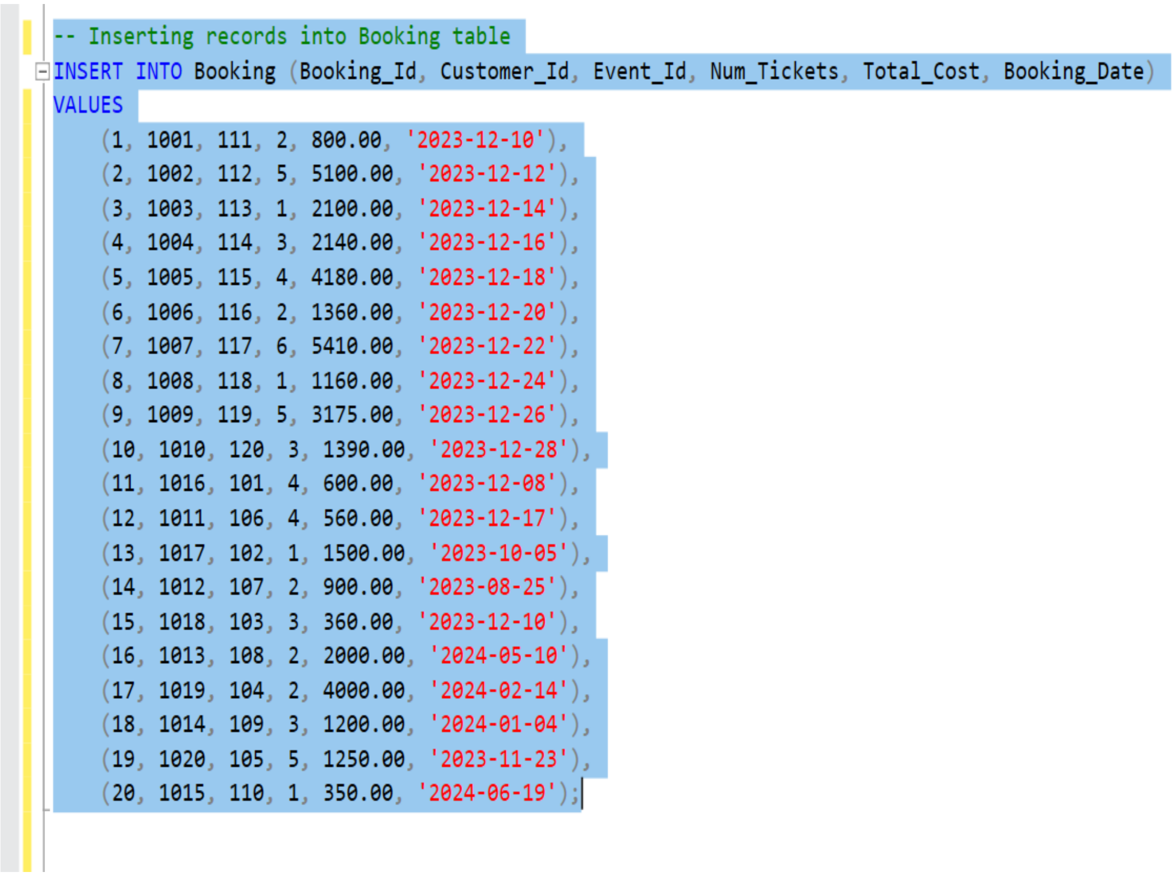
```sql
-- Insert sample records into Event table
INSERT INTO Venue (Venue_Id, Venue_name, Address)
VALUES
    (1, 'ABC Concert Hall', 'MG Road Thrissur, Kerala'),
    (2, 'XYZ Stadium', 'Second Street, Bangalore, Karnataka'),
    (3, 'YUN Theatre', 'Naoroji Road, Mumbai, Maharashtra'),
    (4, 'ASD Stadium', 'SMS Road, Kochi, Kerala'),
    (5, 'KJH Concert Hall', 'Minister Road, Hyderabad, Telangana'),
    (6, 'MRS Stadium', 'Akbar Road, Delhi, Uttar Pradesh'),
    (7, 'SRM Concert Hall', 'Tughlaq Road, Jaipur, Rajasthan'),
    (8, 'EFG Theatre', 'Park Street, Kolkata, West Bengal'),
    (9, 'BRS Theatre', 'Tilak Marg, Delhi, Uttar Pradesh'),
    (10, 'CFR Concert Hall', 'RS Road, Trivandrum, Kerala'),
    (11, 'Royal Palace', '23 Pinnavar Street, Warangal'),
    (12, 'Emerald Gardens', 'Hunter Road, Warangal'),
    (13, 'Mystic Meadows', 'Mulugu Road, Mulugu'),
    (14, 'Grand Plaza', 'Aramghar, Ranga Reddy'),
    (15, 'Serenity Hall', 'L.B Nagar, Hyderabad'),
    (16, 'Harmony Gardens', '2-24, Airport Road, Shamshabad, Hyderabad'),
    (17, 'Sunset Haven', 'Madhura Lane, Khammam'),
    (18, 'Eternal Palace', 'Parade Ground, Hyderabad'),
    (19, 'Whispering Woods', 'KPHB COLONY, Hanamkonda'),
    (20, 'Enchanting Oasis', 'Rudragudem, Nallabelli');
```



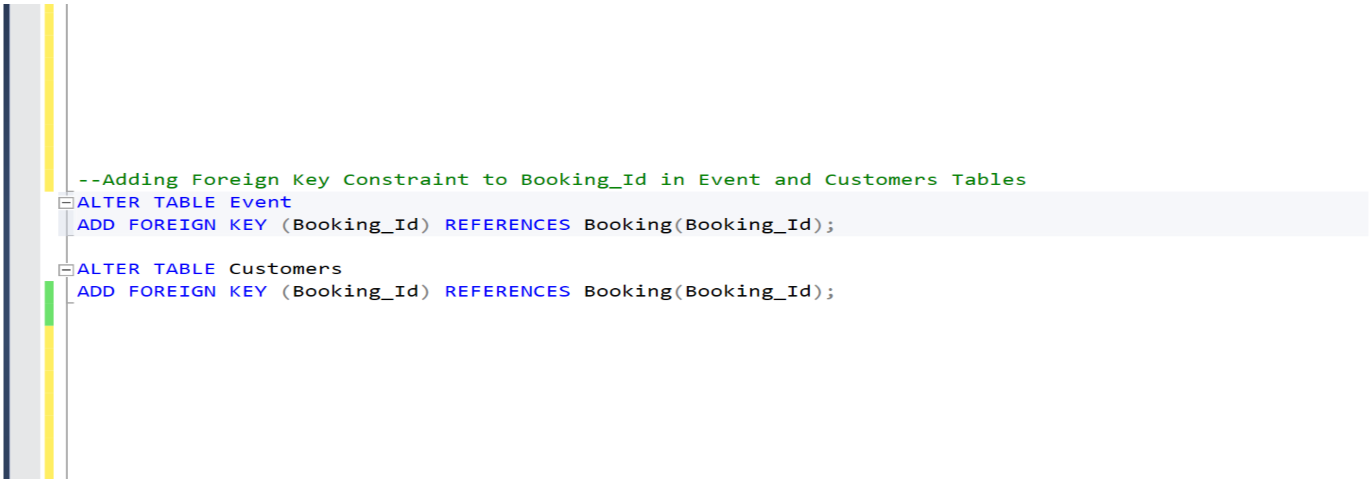
```sql
INSERT INTO Event (Event_id, Event_Name, Event_Date, Event_Time, Venue_id, Total_Seats, Available_Seats, Ticket_Price, Event_Type, Bookin
VALUES
    (101, 'Anandham', '2024-01-05', '13:00:00', 1, 200, 150, 150.00, 'Movie', 11),
    (102, 'YHJ Concert', '2024-02-22', '16:30:00', 2, 1000, 850, 1500.00, 'Concert', 13),
    (103, 'Jawan', '2023-12-15', '07:00:00', 3, 350, 200, 120.00, 'Movie', 15),
    (104, 'Cricket World Cup Final', '2024-04-12', '14:00:00', 4, 20000, 0, 2000.00, 'Sports', 17),
    (105, 'ZGY Concert', '2024-01-14', '10:00:00', 5, 2500, 1000, 250.00, 'Concert', 19),
    (106, 'Queen', '2023-12-19', '19:00:00', 6, 300, 100, 140.00, 'Movie', 12),
    (107, 'FIFA World Cup Semi-Final', '2024-03-04', '12:30:00', 7, 25000, 20000, 450.00, 'Sports', 14),
    (108, 'MRQ Concert', '2024-06-25', '09:00:00', 8, 2500, 1500, 1000.00, 'Concert', 16),
    (109, 'Badminton Final', '2024-02-13', '08:30:00', 9, 4000, 2000, 400.00, 'Sports', 18),
    (110, 'WQA Concert', '2024-08-18', '10:00:00', 10, 3500, 2000, 350.00, 'Concert', 20),
    (111, 'Bollywood Night', '2023-12-15', '20:00:00', 11, 200, 200, 150.00, 'Concert', 1),
    (112, 'Cricket Match', '2023-12-20', '15:30:00', 12, 5000, 5000, 100.00, 'Sports', 2),
    (113, 'Classical Concert', '2023-12-18', '19:30:00', 13, 150, 150, 200.00, 'Concert', 3),
    (114, 'Football Championship', '2023-12-22', '17:00:00', 14, 10000, 10000, 80.00, 'Sports', 4),
    (115, 'Movie Premiere', '2023-12-17', '21:00:00', 15, 300, 300, 120.00, 'Movie', 5),
    (116, 'Rock Music Festival', '2023-12-19', '18:30:00', 16, 500, 500, 180.00, 'Concert', 6),
    (117, 'Tennis Tournament', '2023-12-21', '14:00:00', 17, 2000, 2000, 90.00, 'Sports', 7),
    (118, 'Comedy Show', '2023-12-16', '19:00:00', 18, 100, 100, 160.00, 'Concert', 8),
    (119, 'Basketball Championship', '2023-12-23', '16:30:00', 19, 8000, 8000, 75.00, 'Sports', 9),
    (120, 'Dance Performance', '2023-12-14', '22:00:00', 20, 250, 250, 130.00, 'Concert', 10);
```



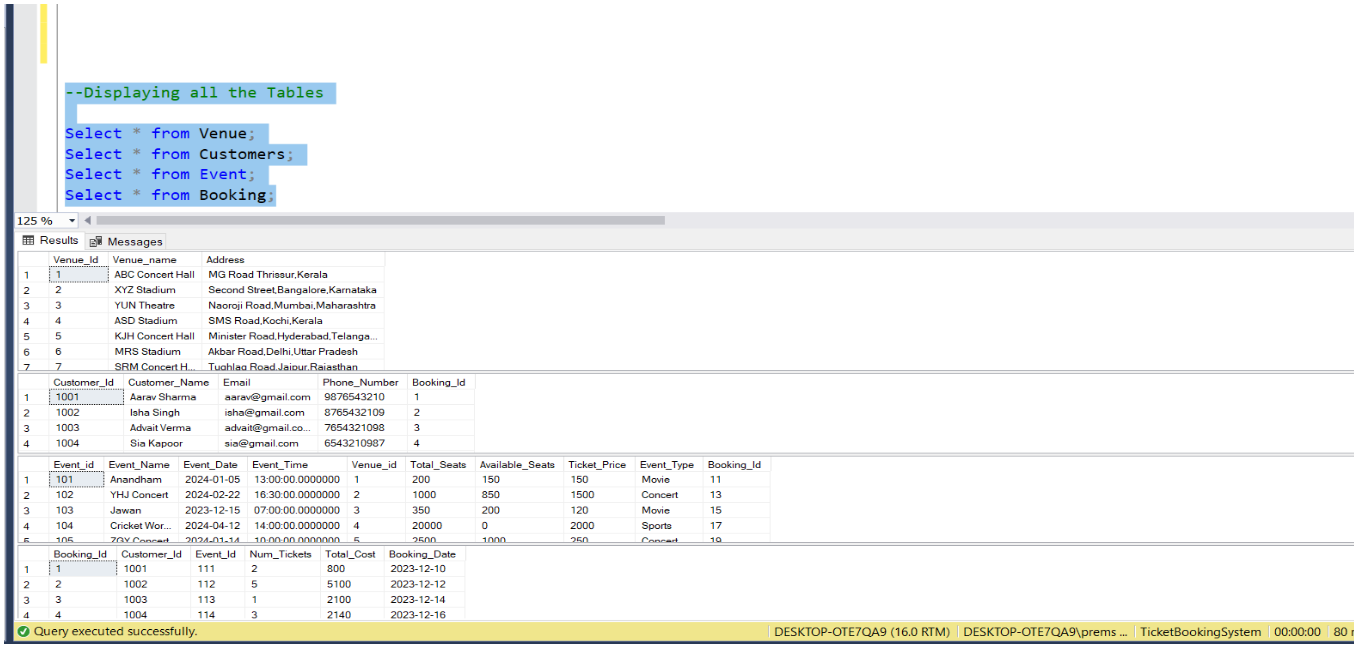
```sql
-- Inserting records into Customers table
INSERT INTO Customers (Customer_Id, Customer_Name, Email, Phone_Number, Booking_Id)
VALUES
(1001, 'Aarav Sharma', 'aarav@gmail.com', '9876543210', 1),
    (1002, 'Isha Singh', 'isha@gmail.com', '8765432109', 2),
    (1003, 'Advait Verma', 'advait@gmail.com', '7654321098', 3),
    (1004, 'Sia Kapoor', 'sia@gmail.com', '6543210987', 4),
    (1005, 'Aryan Patel', 'aryan@gmail.com', '5432109876', 5),
    (1006, 'Anaya Gupta', 'anaya@gmail.com', '4321098765', 6),
    (1007, 'Vihaan Kumar', 'vihaan@gmail.com', '3210987654', 7),
    (1008, 'Aisha Yadav', 'aisha@gmail.com', '2109876543', 8),
    (1009, 'Arjun Malhotra', 'arjun@gmail.com', '1098765432', 9),
    (1010, 'Zara Khan', 'zara@gmail.com', '9876543210', 10),
    (1011, 'Sreya Das', 'sreya@gmail.com', 9999999000, 12),
    (1012, 'Srinithi Verma', 'srinithi@gmail.com', 9123499879, 14),
    (1013, 'Maria Varghese', 'maria@gmail.com', 9999888888, 16),
    (1014, 'Amrutha Jose', 'amrutha@gmail.com', 9207234567, 18),
    (1015, 'Devika Dinesh', 'devika@gmail.com', 9123456789, 20),
    (1016, 'Reshma K', 'reshma@gmail.com', 9802864713, 11),
    (1017, 'Malavika Pradeep', 'malavika@gmail.com', 9988776655, 13),
    (1018, 'Prem Kishan', 'prem@gmail.com', 7095919679, 15),
    (1019, 'Neha Singh', 'neha@gmail.com', 9912658491, 17),
    (1020, 'Meghan Gupta', 'meghan@gmail.com', 8965458491, 19);
```



```sql
-- Inserting records into Booking table
INSERT INTO Booking (Booking_Id, Customer_Id, Event_Id, Num_Tickets, Total_Cost, Booking_Date)
VALUES
    (1, 1001, 111, 2, 800.00, '2023-12-10'),
    (2, 1002, 112, 5, 5100.00, '2023-12-12'),
    (3, 1003, 113, 1, 2100.00, '2023-12-14'),
    (4, 1004, 114, 3, 2140.00, '2023-12-16'),
    (5, 1005, 115, 4, 4180.00, '2023-12-18'),
    (6, 1006, 116, 2, 1360.00, '2023-12-20'),
    (7, 1007, 117, 6, 5410.00, '2023-12-22'),
    (8, 1008, 118, 1, 1160.00, '2023-12-24'),
    (9, 1009, 119, 5, 3175.00, '2023-12-26'),
    (10, 1010, 120, 3, 1390.00, '2023-12-28'),
    (11, 1016, 101, 4, 600.00, '2023-12-08'),
    (12, 1011, 106, 4, 560.00, '2023-12-17'),
    (13, 1017, 102, 1, 1500.00, '2023-10-05'),
    (14, 1012, 107, 2, 900.00, '2023-08-25'),
    (15, 1018, 103, 3, 360.00, '2023-12-10'),
    (16, 1013, 108, 2, 2000.00, '2024-05-10'),
    (17, 1019, 104, 2, 4000.00, '2024-02-14'),
    (18, 1014, 109, 3, 1200.00, '2024-01-04'),
    (19, 1020, 105, 5, 1250.00, '2023-11-23'),
    (20, 1015, 110, 1, 350.00, '2024-06-19');
```



```sql
--Adding Foreign Key Constraint to Booking_Id in Event and Customers Tables
ALTER TABLE Event
ADD FOREIGN KEY (Booking_Id) REFERENCES Booking(Booking_Id);

ALTER TABLE Customers
ADD FOREIGN KEY (Booking_Id) REFERENCES Booking(Booking_Id);
```



```sql
--Displaying all the Tables

Select * from Venue;
Select * from Customers;
Select * from Event;
Select * from Booking;
```

	Venue_Id	Venue_name	Address
1	1	ABC Concert Hall	MG Road Thrissur,Kerala
2	2	XYZ Stadium	Second Street,Bangalore,Karnataka
3	3	YUN Theatre	Naoroji Road,Mumbai,Maharashtra
4	4	ASD Stadium	SMS Road,Kochi,Kerala
5	5	KJH Concert Hall	Minister Road,Hyderabad,Telanga...
6	6	MRS Stadium	Akbar Road,Delhi,Uttar Pradesh
7	7	SRM Concert H...	Tughlag Road,Jaipur,Rajasthan

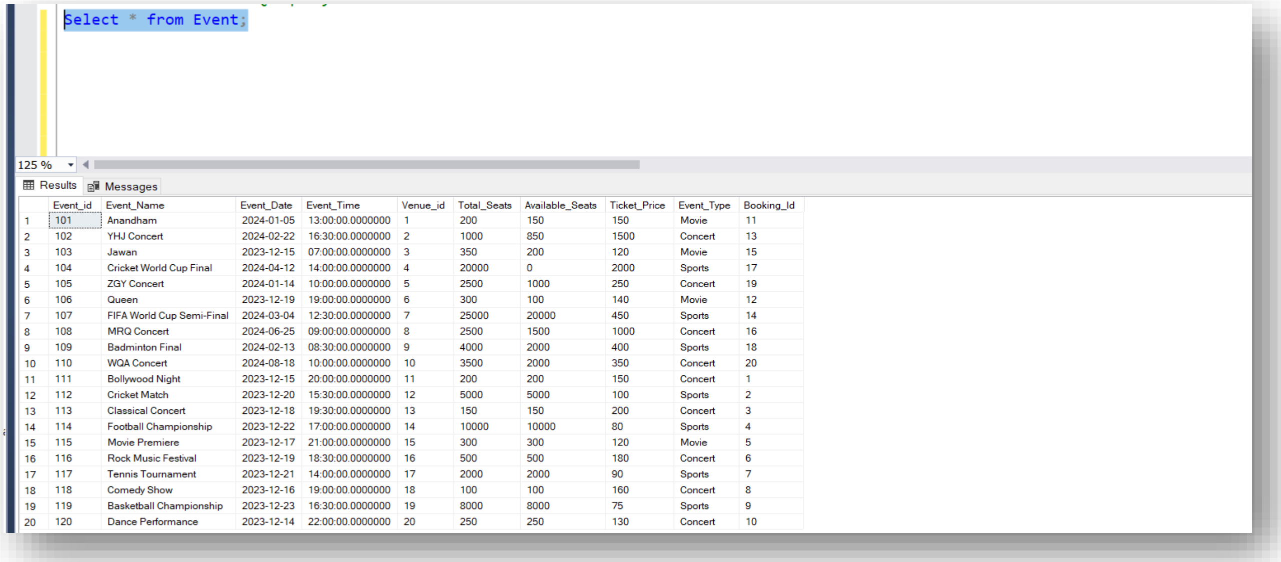
	Customer_Id	Customer_Name	Email	Phone_Number	Booking_Id
1	1001	Aarav Sharma	aarav@gmail.com	9876543210	1
2	1002	Isha Singh	isha@gmail.com	8765432109	2
3	1003	Advait Verma	advait@gmail.co...	7654321098	3
4	1004	Sia Kapoor	sia@gmail.com	6543210987	4

	Event_id	Event_Name	Event_Date	Event_Time	Venue_id	Total_Seats	Available_Seats	Ticket_Price	Event_Type	Booking_Id
1	101	Anandham	2024-01-05	13:00:00.0000000	1	200	150	150	Movie	11
2	102	YHJ Concert	2024-02-22	16:30:00.0000000	2	1000	850	1500	Concert	13
3	103	Jawan	2023-12-15	07:00:00.0000000	3	350	200	120	Movie	15
4	104	Cricket Wor...	2024-04-12	14:00:00.0000000	4	20000	0	2000	Sports	17
5	105	ZGY Concert	2024-01-14	10:00:00.0000000	5	2500	1000	250	Concert	19

	Booking_Id	Customer_Id	Event_Id	Num_Tickets	Total_Cost	Booking_Date
1	1	1001	111	2	800	2023-12-10
2	2	1002	112	5	5100	2023-12-12
3	3	1003	113	1	2100	2023-12-14
4	4	1004	114	3	2140	2023-12-16

Query executed successfully.

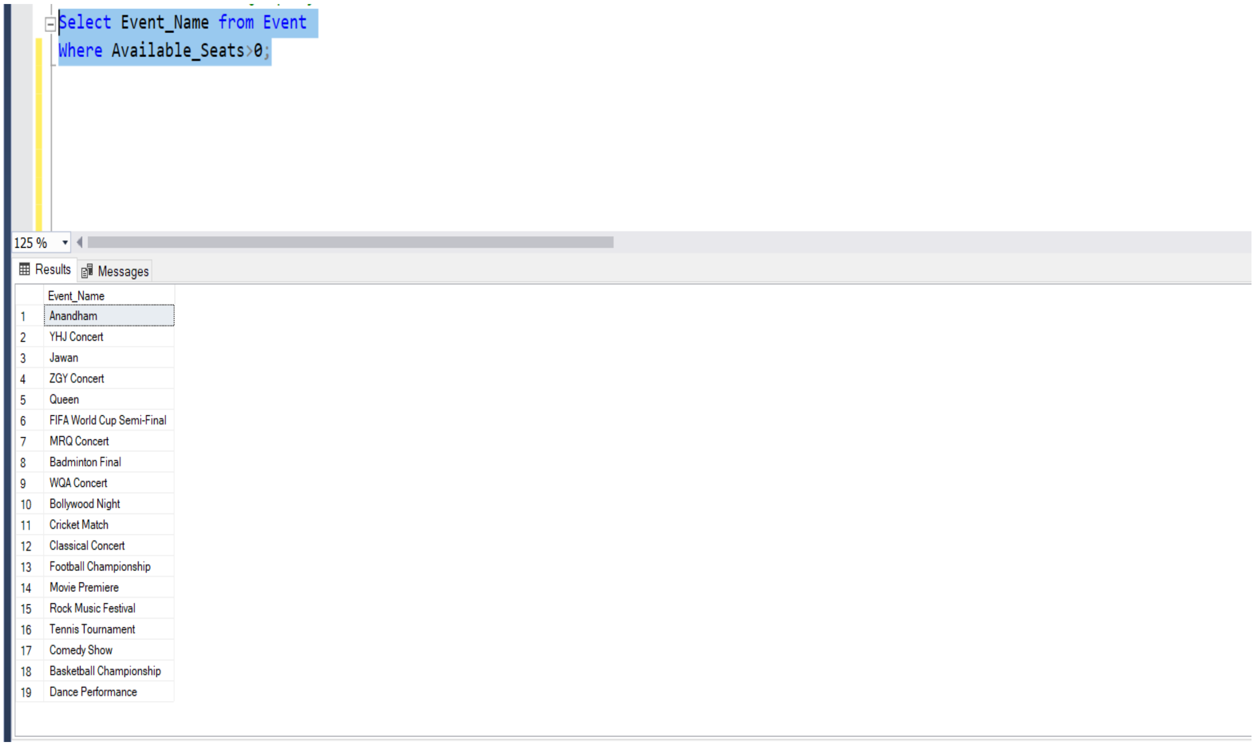
5)Write a SQL query to list all Events.



```sql
Select * from Event;
```

	Event_id	Event_Name	Event_Date	Event_Time	Venue_id	Total_Seats	Available_Seats	Ticket_Price	Event_Type	Booking_Id
1	101	Anandham	2024-01-05	13:00:00.0000000	1	200	150	150	Movie	11
2	102	YHJ Concert	2024-02-22	16:30:00.0000000	2	1000	850	1500	Concert	13
3	103	Jawan	2023-12-15	07:00:00.0000000	3	350	200	120	Movie	15
4	104	Cricket World Cup Final	2024-04-12	14:00:00.0000000	4	20000	0	2000	Sports	17
5	105	ZGY Concert	2024-01-14	10:00:00.0000000	5	2500	1000	250	Concert	19
6	106	Queen	2023-12-19	19:00:00.0000000	6	300	100	140	Movie	12
7	107	FIFA World Cup Semi-Final	2024-03-04	12:30:00.0000000	7	25000	20000	450	Sports	14
8	108	MRQ Concert	2024-06-25	09:00:00.0000000	8	2500	1500	1000	Concert	16
9	109	Badminton Final	2024-02-13	08:30:00.0000000	9	4000	2000	400	Sports	18
10	110	WQA Concert	2024-08-18	10:00:00.0000000	10	3500	2000	350	Concert	20
11	111	Bollywood Night	2023-12-15	20:00:00.0000000	11	200	200	150	Concert	1
12	112	Cricket Match	2023-12-20	15:30:00.0000000	12	5000	5000	100	Sports	2
13	113	Classical Concert	2023-12-18	19:30:00.0000000	13	150	150	200	Concert	3
14	114	Football Championship	2023-12-22	17:00:00.0000000	14	10000	10000	80	Sports	4
15	115	Movie Premiere	2023-12-17	21:00:00.0000000	15	300	300	120	Movie	5
16	116	Rock Music Festival	2023-12-19	18:30:00.0000000	16	500	500	180	Concert	6
17	117	Tennis Tournament	2023-12-21	14:00:00.0000000	17	2000	2000	90	Sports	7
18	118	Comedy Show	2023-12-16	19:00:00.0000000	18	100	100	160	Concert	8
19	119	Basketball Championship	2023-12-23	16:30:00.0000000	19	8000	8000	75	Sports	9
20	120	Dance Performance	2023-12-14	22:00:00.0000000	20	250	250	130	Concert	10

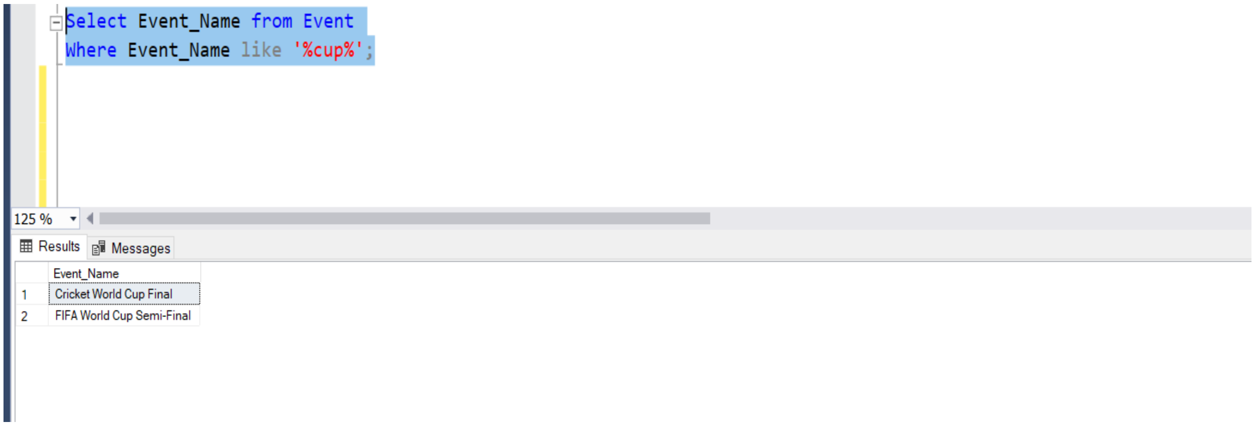
6)Write a SQL query to select events with available tickets.



```sql
Select Event_Name from Event
Where Available_Seats>0;
```

	Event_Name
1	Anandham
2	YHJ Concert
3	Jawan
4	ZGY Concert
5	Queen
6	FIFA World Cup Semi-Final
7	MRQ Concert
8	Badminton Final
9	WQA Concert
10	Bollywood Night
11	Cricket Match
12	Classical Concert
13	Football Championship
14	Movie Premiere
15	Rock Music Festival
16	Tennis Tournament
17	Comedy Show
18	Basketball Championship
19	Dance Performance

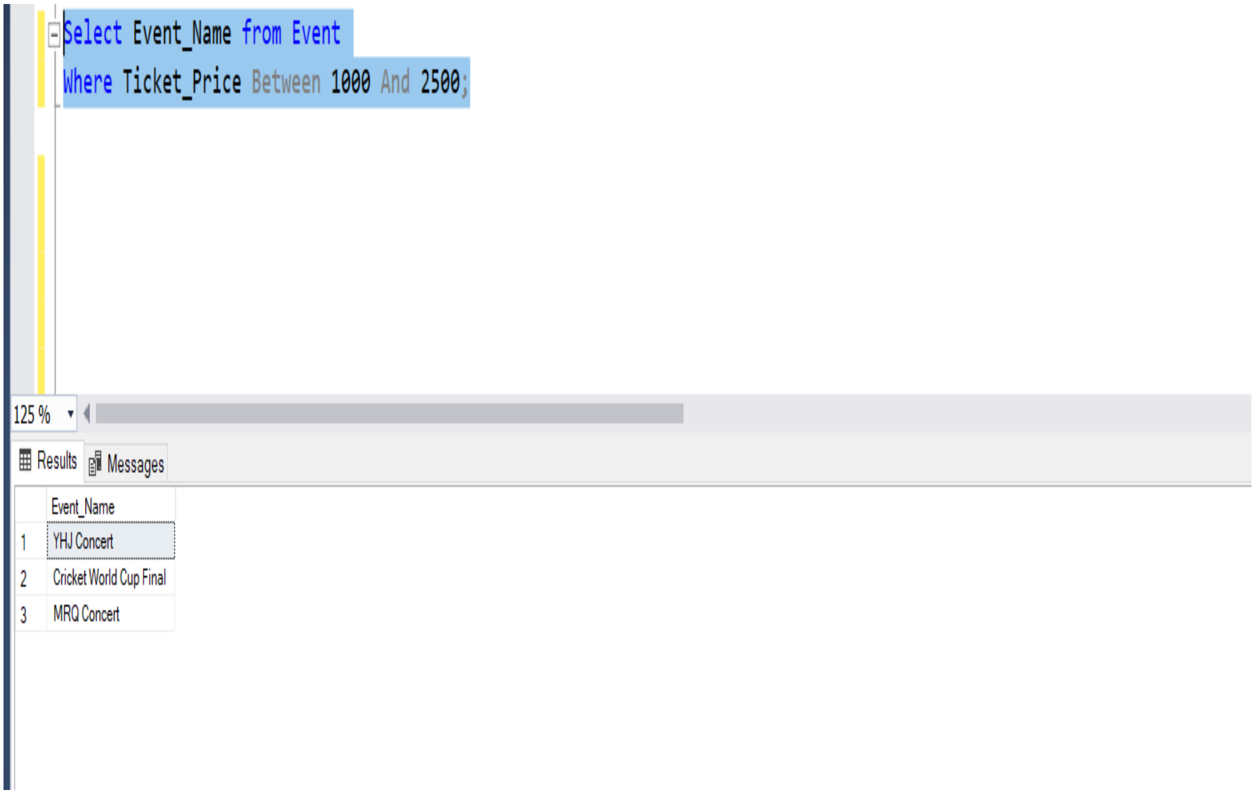
7)Write a SQL query to select events name partial match with ‘cup’.



```sql
Select Event_Name from Event
Where Event_Name like '%cup%';
```

	Event_Name
1	Cricket World Cup Final
2	FIFA World Cup Semi-Final

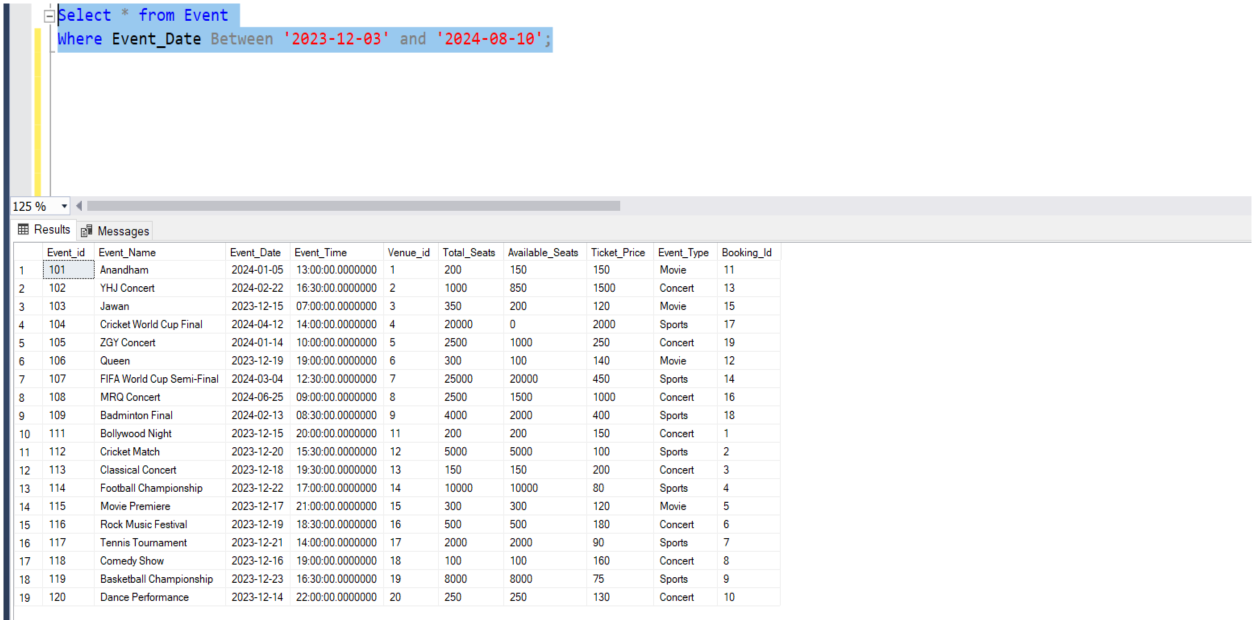
8) Write a SQL query to select events with ticket price range is between 1000 to 2500.



```sql
Select Event_Name from Event
Where Ticket_Price Between 1000 And 2500;
```

	Event_Name
1	YHJ Concert
2	Cricket World Cup Final
3	MRQ Concert

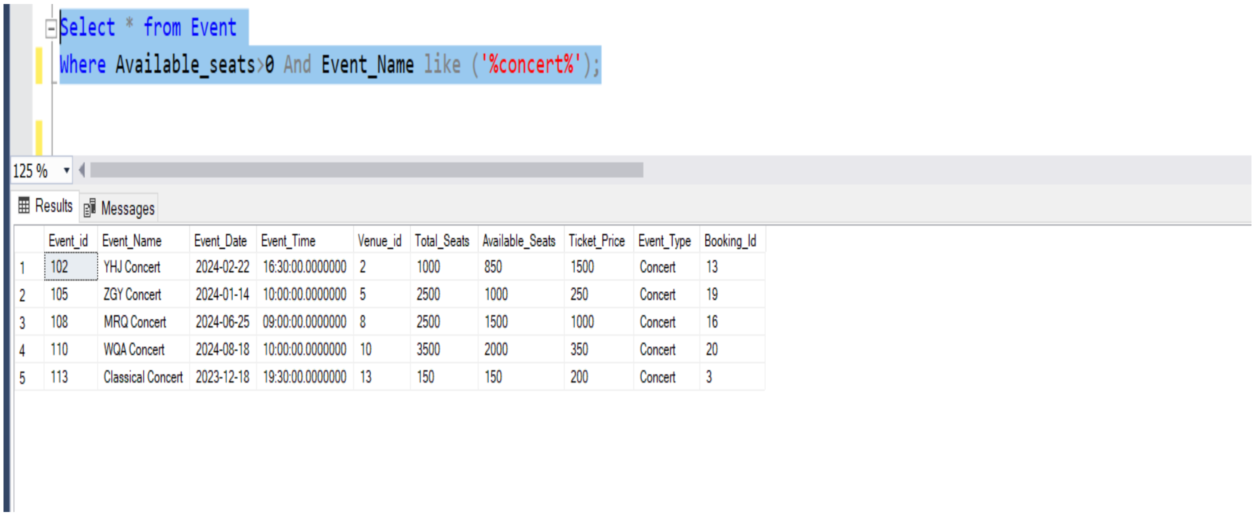
9) Write a SQL query to retrieve events with dates falling within a specific range.



```sql
Select * from Event
Where Event_Date Between '2023-12-03' and '2024-08-10';
```

	Event_id	Event_Name	Event_Date	Event_Time	Venue_id	Total_Seats	Available_Seats	Ticket_Price	Event_Type	Booking_Id
1	101	Anandham	2024-01-05	13:00:00.0000000	1	200	150	150	Movie	11
2	102	YHJ Concert	2024-02-22	16:30:00.0000000	2	1000	850	1500	Concert	13
3	103	Jawan	2023-12-15	07:00:00.0000000	3	350	200	120	Movie	15
4	104	Cricket World Cup Final	2024-04-12	14:00:00.0000000	4	20000	0	2000	Sports	17
5	105	ZGY Concert	2024-01-14	10:00:00.0000000	5	2500	1000	250	Concert	19
6	106	Queen	2023-12-19	19:00:00.0000000	6	300	100	140	Movie	12
7	107	FIFA World Cup Semi-Final	2024-03-04	12:30:00.0000000	7	25000	20000	450	Sports	14
8	108	MRQ Concert	2024-06-25	09:00:00.0000000	8	2500	1500	1000	Concert	16
9	109	Badminton Final	2024-02-13	08:30:00.0000000	9	4000	2000	400	Sports	18
10	111	Bollywood Night	2023-12-15	20:00:00.0000000	11	200	200	150	Concert	1
11	112	Cricket Match	2023-12-20	15:30:00.0000000	12	5000	5000	100	Sports	2
12	113	Classical Concert	2023-12-18	19:30:00.0000000	13	150	150	200	Concert	3
13	114	Football Championship	2023-12-22	17:00:00.0000000	14	10000	10000	80	Sports	4
14	115	Movie Premiere	2023-12-17	21:00:00.0000000	15	300	300	120	Movie	5
15	116	Rock Music Festival	2023-12-19	18:30:00.0000000	16	500	500	180	Concert	6
16	117	Tennis Tournament	2023-12-21	14:00:00.0000000	17	2000	2000	90	Sports	7
17	118	Comedy Show	2023-12-16	19:00:00.0000000	18	100	100	160	Concert	8
18	119	Basketball Championship	2023-12-23	16:30:00.0000000	19	8000	8000	75	Sports	9
19	120	Dance Performance	2023-12-14	22:00:00.0000000	20	250	250	130	Concert	10

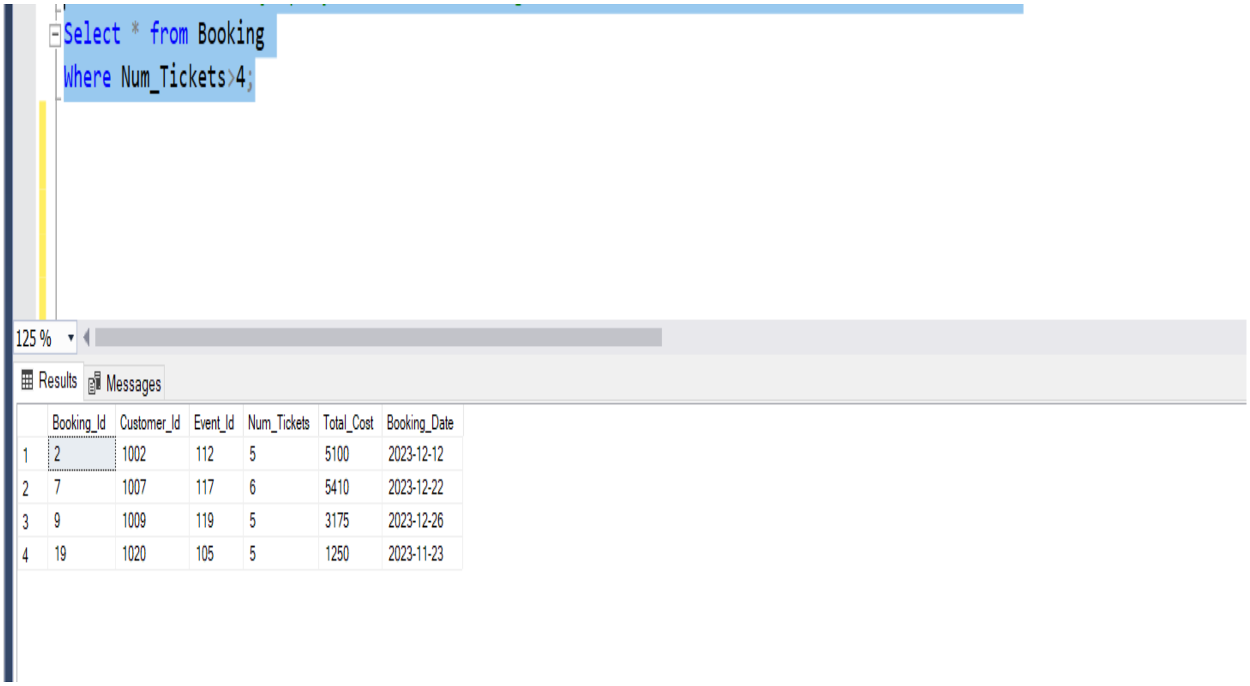
10)Write a SQL query to retrieve events with available tickets that also have "Concert" in their name.



```sql
Select * from Event
Where Available_seats>0 And Event_Name like ('%concert%');
```

	Event_id	Event_Name	Event_Date	Event_Time	Venue_id	Total_Seats	Available_Seats	Ticket_Price	Event_Type	Booking_Id
1	102	YHJ Concert	2024-02-22	16:30:00.0000000	2	1000	850	1500	Concert	13
2	105	ZGY Concert	2024-01-14	10:00:00.0000000	5	2500	1000	250	Concert	19
3	108	MRQ Concert	2024-06-25	09:00:00.0000000	8	2500	1500	1000	Concert	16
4	110	WQA Concert	2024-08-18	10:00:00.0000000	10	3500	2000	350	Concert	20
5	113	Classical Concert	2023-12-18	19:30:00.0000000	13	150	150	200	Concert	3

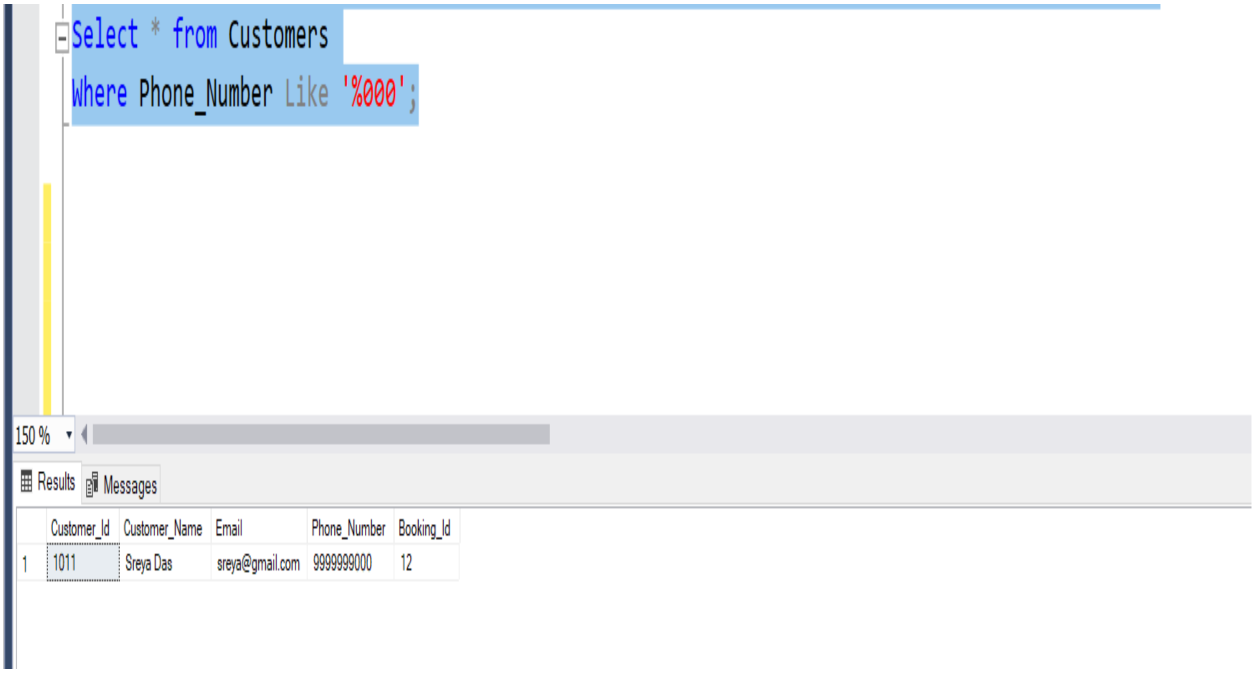
11) Write a SQL query to retrieve bookings details contains booked no of ticket more than 4.



```sql
Select * from Booking
Where Num_Tickets>4;
```

	Booking_Id	Customer_Id	Event_Id	Num_Tickets	Total_Cost	Booking_Date
1	2	1002	112	5	5100	2023-12-12
2	7	1007	117	6	5410	2023-12-22
3	9	1009	119	5	3175	2023-12-26
4	19	1020	105	5	1250	2023-11-23

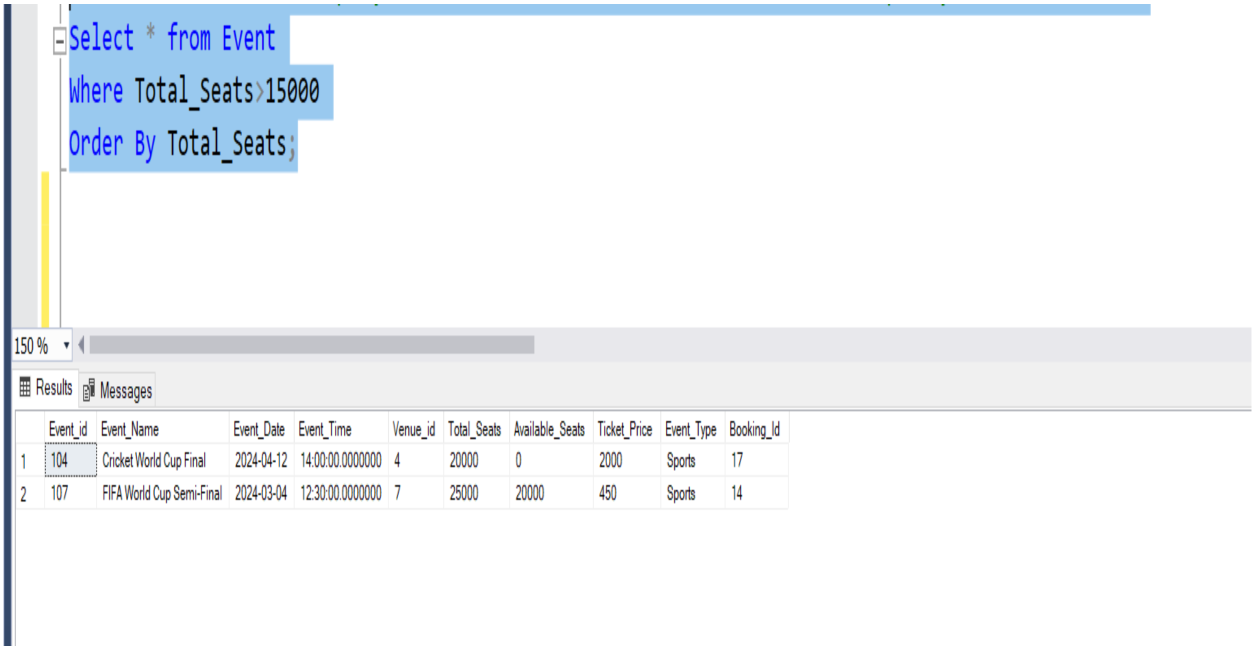
12) Write a SQL query to retrieve customer information whose phone number end with ‘000’.



```sql
Select * from Customers
Where Phone_Number Like '%000';
```

	Customer_Id	Customer_Name	Email	Phone_Number	Booking_Id
1	1011	Sreya Das	sreya@gmail.com	9999999000	12

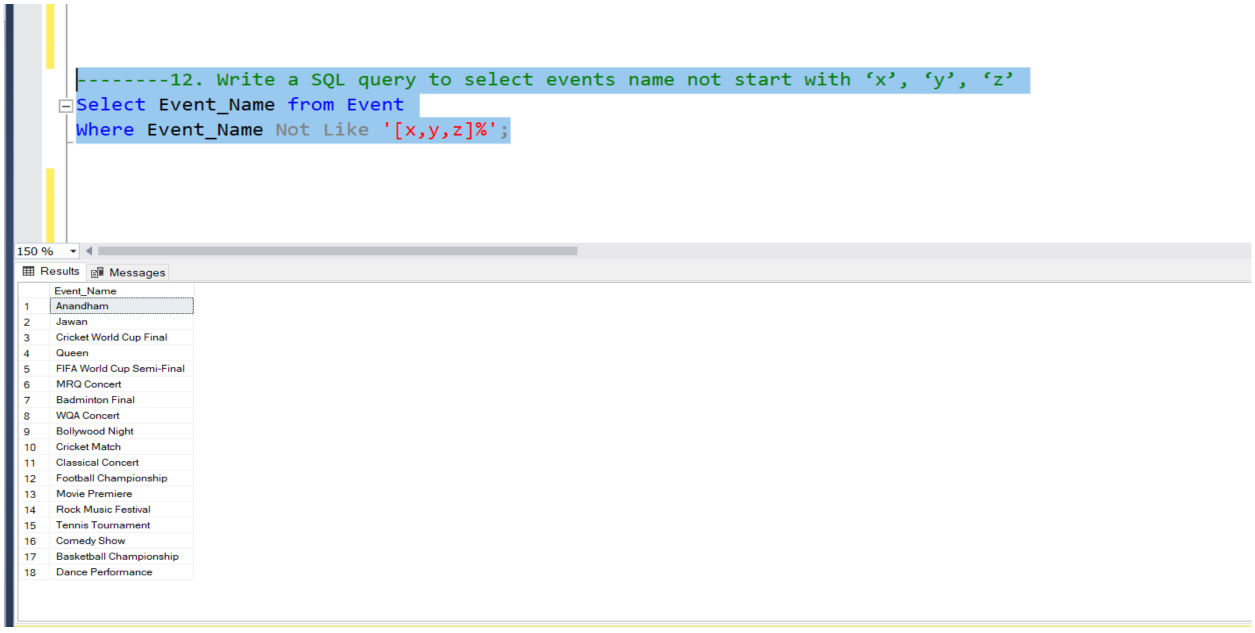
13) Write a SQL query to retrieve the events in order whose seat capacity more than 15000.



```
Select * from Event
Where Total_Seats>15000
Order By Total_Seats;
```

	Event_id	Event_Name	Event_Date	Event_Time	Venue_id	Total_Seats	Available_Seats	Ticket_Price	Event_Type	Booking_Id
1	104	Cricket World Cup Final	2024-04-12	14:00:00.0000000	4	20000	0	2000	Sports	17
2	107	FIFA World Cup Semi-Final	2024-03-04	12:30:00.0000000	7	25000	20000	450	Sports	14

14) Write a SQL query to select events name not start with ‘x’, ‘y’, ‘z’.

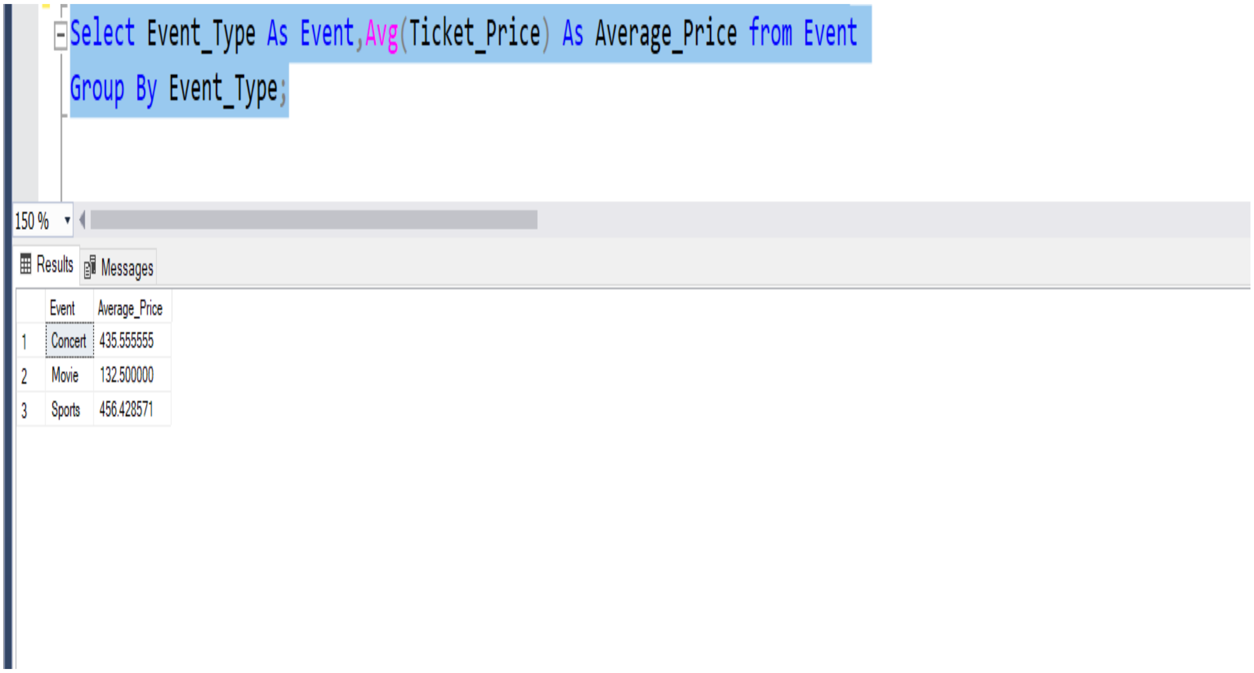


```
--------12. Write a SQL query to select events name not start with ‘x’, ‘y’, ‘z’
Select Event_Name from Event
Where Event_Name Not Like '[x,y,z]%';
```

	Event_Name
1	Anandham
2	Jawan
3	Cricket World Cup Final
4	Queen
5	FIFA World Cup Semi-Final
6	MRQ Concert
7	Badminton Final
8	WQA Concert
9	Bollywood Night
10	Cricket Match
11	Classical Concert
12	Football Championship
13	Movie Premiere
14	Rock Music Festival
15	Tennis Tournament
16	Comedy Show
17	Basketball Championship
18	Dance Performance

-----------------------------------Tasks 3---------------------------------------

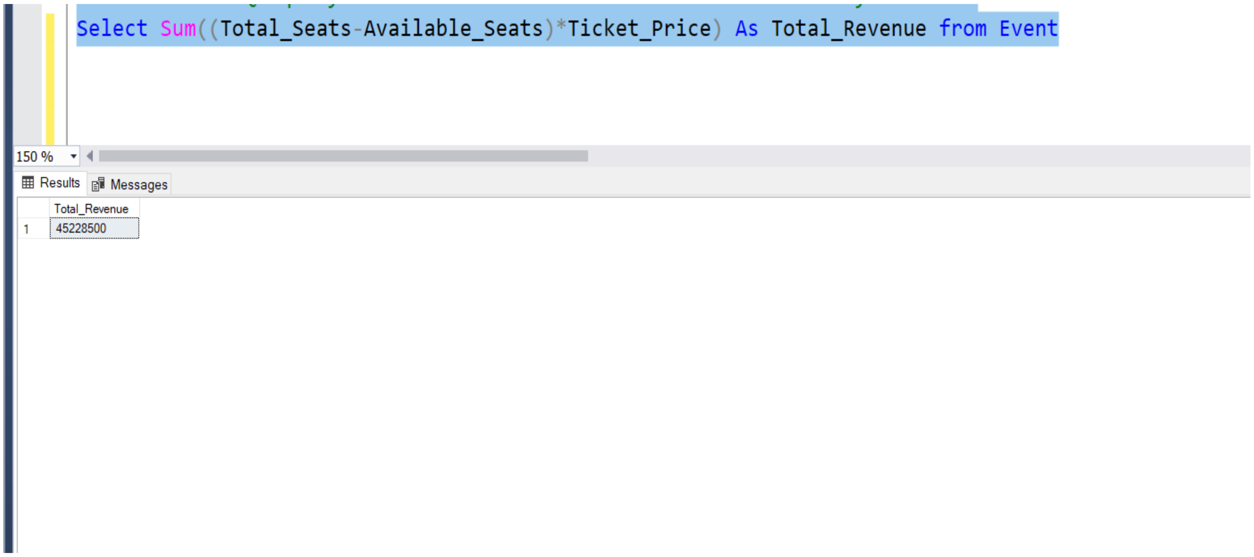
15)Write a SQL query to List Events and Their Average Ticket Prices.



```
Select Event_Type As Event,Avg(Ticket_Price) As Average_Price from Event
Group By Event_Type;
```

	Event	Average_Price
1	Concert	435.555555
2	Movie	132.500000
3	Sports	456.428571

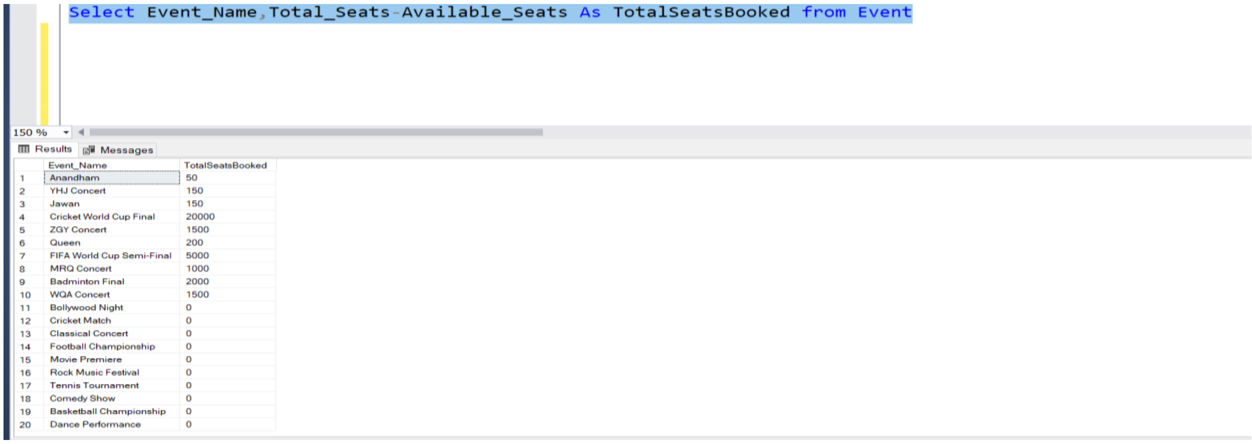
16)Write a SQL query to Calculate the Total Revenue Generated by Events.



```
Select Sum((Total_Seats-Available_Seats)*Ticket_Price) As Total_Revenue from Event
```

	Total_Revenue
1	45228500

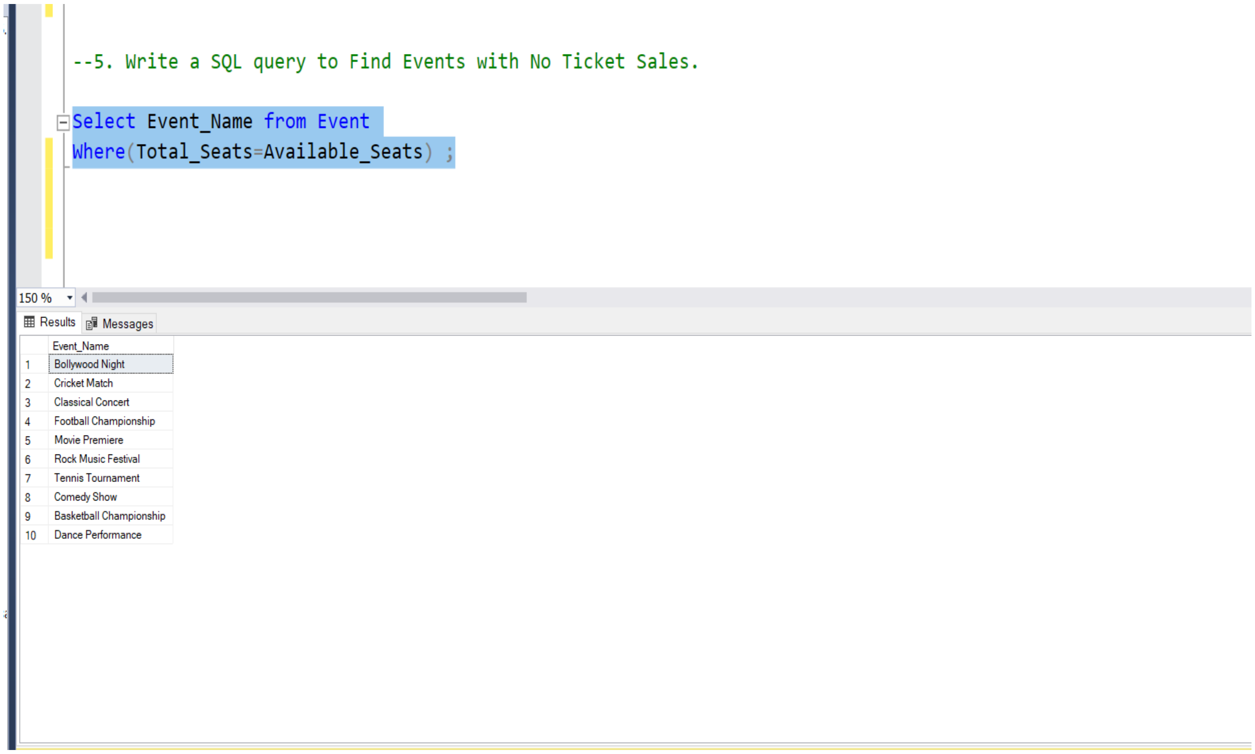
17)Write a SQL query to Calculate the Total Number of Tickets Sold for Each Event.



```sql
Select Event_Name,Total_Seats-Available_Seats As TotalSeatsBooked from Event
```

	Event_Name	TotalSeatsBooked
1	Anandham	50
2	YHJ Concert	150
3	Jawan	150
4	Cricket World Cup Final	20000
5	ZGY Concert	1500
6	Queen	200
7	FIFA World Cup Semi-Final	5000
8	MRQ Concert	1000
9	Badminton Final	2000
10	WQA Concert	1500
11	Bollywood Night	0
12	Cricket Match	0
13	Classical Concert	0
14	Football Championship	0
15	Movie Premiere	0
16	Rock Music Festival	0
17	Tennis Tournament	0
18	Comedy Show	0
19	Basketball Championship	0
20	Dance Performance	0

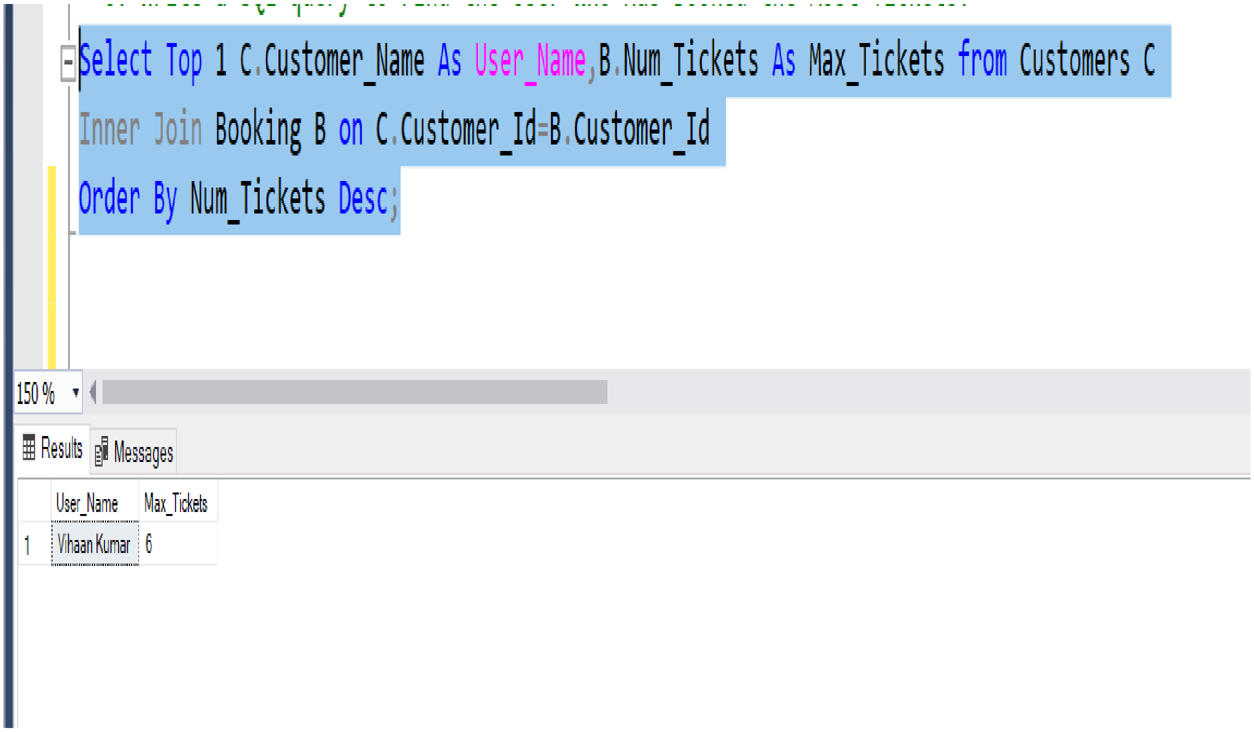
18)Write a SQL query to Find Events with No Ticket Sales.



```sql
--5. Write a SQL query to Find Events with No Ticket Sales.

Select Event_Name from Event
Where(Total_Seats=Available_Seats) ;
```

	Event_Name
1	Bollywood Night
2	Cricket Match
3	Classical Concert
4	Football Championship
5	Movie Premiere
6	Rock Music Festival
7	Tennis Tournament
8	Comedy Show
9	Basketball Championship
10	Dance Performance

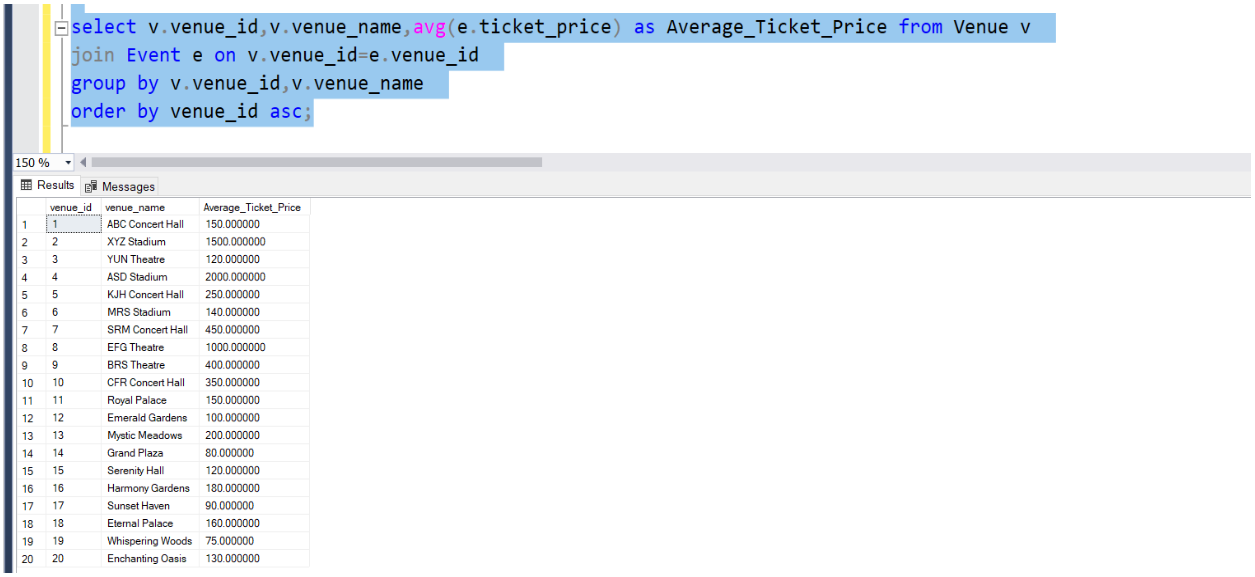
19)Write a SQL query to Find the User Who Has Booked the Most Tickets.



```sql
Select Top 1 C.Customer_Name As User_Name,B.Num_Tickets As Max_Tickets from Customers C
Inner Join Booking B on C.Customer_Id=B.Customer_Id
Order By Num_Tickets Desc;
```

	User_Name	Max_Tickets
1	Vihaan Kumar	6

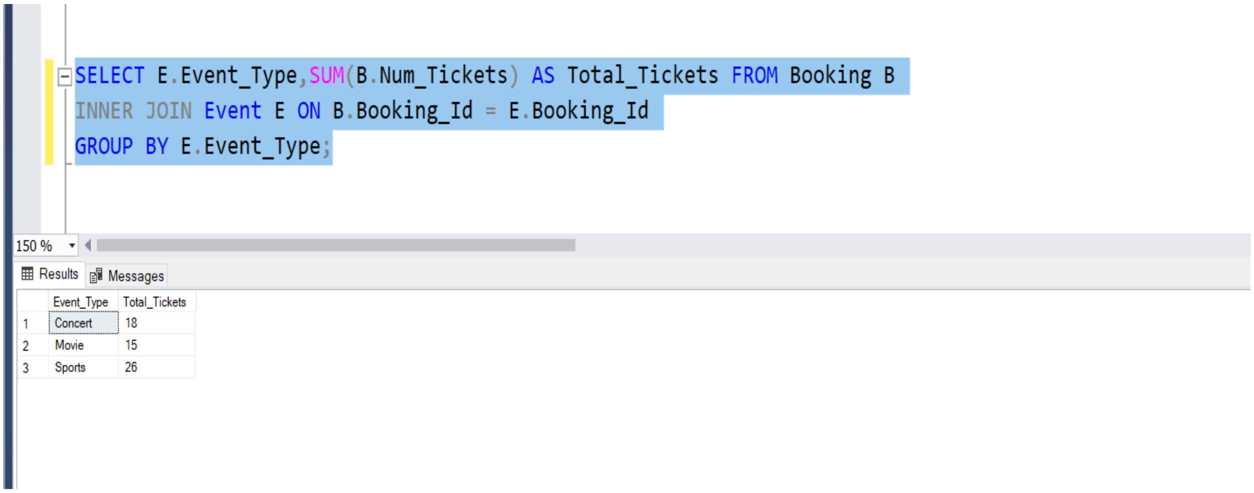
20)Write a SQL query to calculate the average Ticket Price for Events in Each Venue



```sql
select v.venue_id,v.venue_name,avg(e.ticket_price) as Average_Ticket_Price from Venue v
join Event e on v.venue_id=e.venue_id
group by v.venue_id,v.venue_name
order by venue_id asc;
```

	venue_id	venue_name	Average_Ticket_Price
1	1	ABC Concert Hall	150.000000
2	2	XYZ Stadium	1500.000000
3	3	YUN Theatre	120.000000
4	4	ASD Stadium	2000.000000
5	5	KJH Concert Hall	250.000000
6	6	MRS Stadium	140.000000
7	7	SRM Concert Hall	450.000000
8	8	EFG Theatre	1000.000000
9	9	BRS Theatre	400.000000
10	10	CFR Concert Hall	350.000000
11	11	Royal Palace	150.000000
12	12	Emerald Gardens	100.000000
13	13	Mystic Meadows	200.000000
14	14	Grand Plaza	80.000000
15	15	Serenity Hall	120.000000
16	16	Harmony Gardens	180.000000
17	17	Sunset Haven	90.000000
18	18	Eternal Palace	160.000000
19	19	Whispering Woods	75.000000
20	20	Enchanting Oasis	130.000000

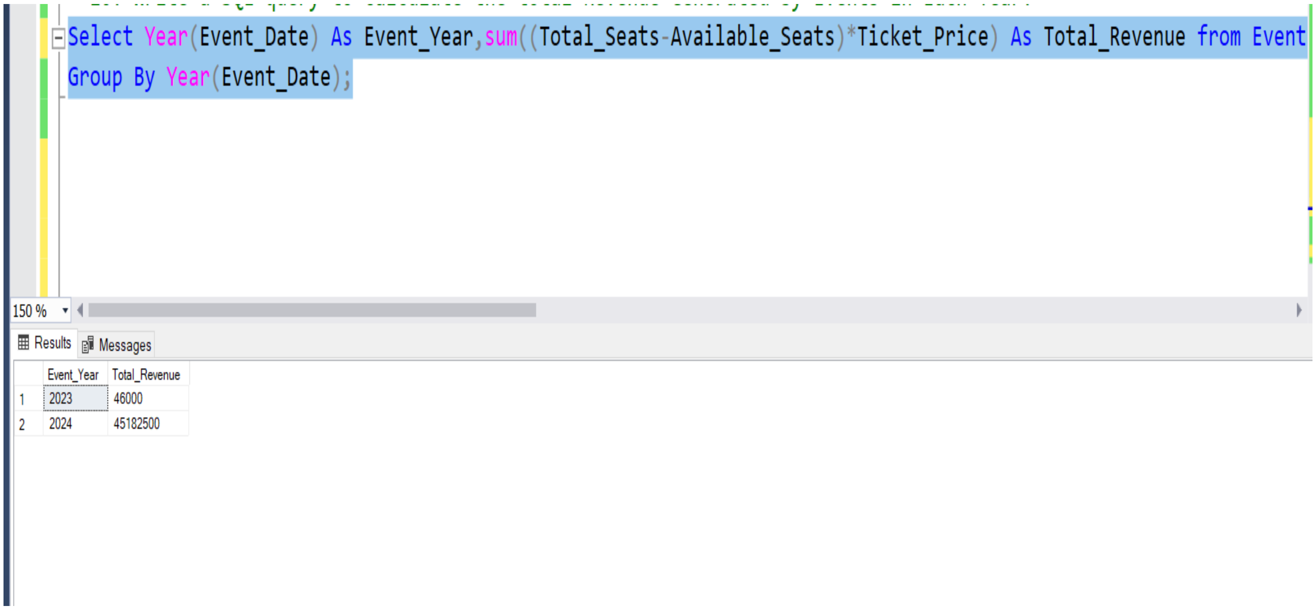
21)Write a SQL query to calculate the total Number of Tickets Sold for Each Event Type.



```sql
SELECT E.Event_Type,SUM(B.Num_Tickets) AS Total_Tickets FROM Booking B
INNER JOIN Event E ON B.Booking_Id = E.Booking_Id
GROUP BY E.Event_Type;
```

	Event_Type	Total_Tickets
1	Concert	18
2	Movie	15
3	Sports	26

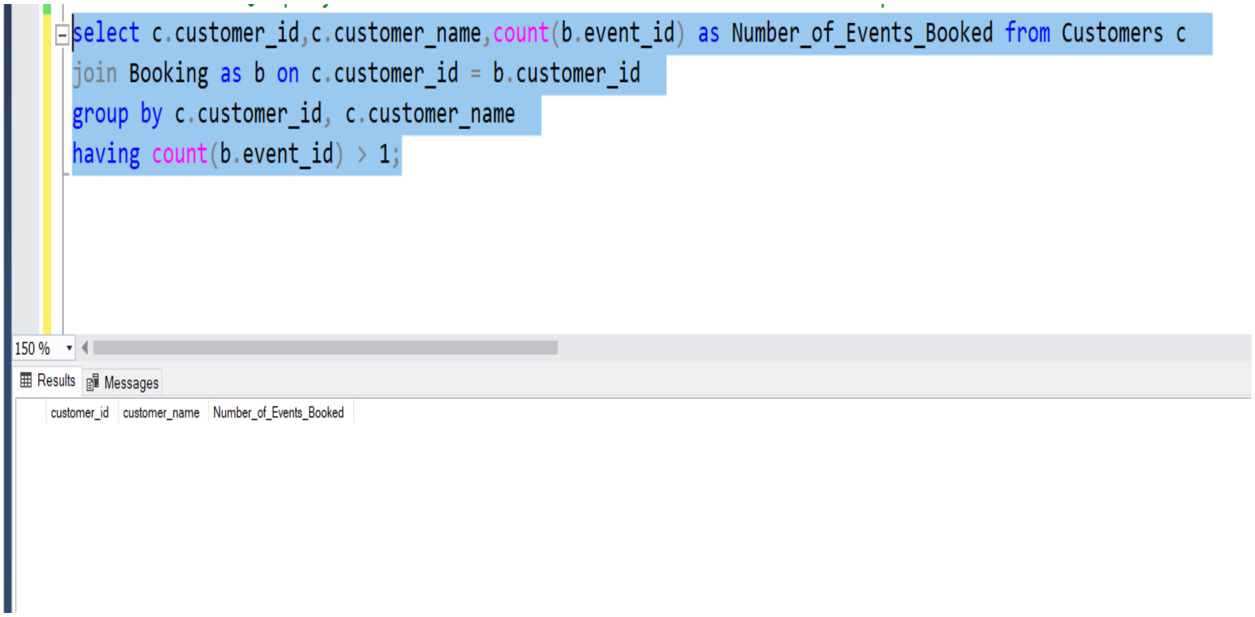
22) Write a SQL query to calculate the total Revenue Generated by Events in Each Year.



```sql
Select Year(Event_Date) As Event_Year,sum((Total_Seats-Available_Seats)*Ticket_Price) As Total_Revenue from Event
Group By Year(Event_Date);
```

	Event_Year	Total_Revenue
1	2023	46000
2	2024	45182500

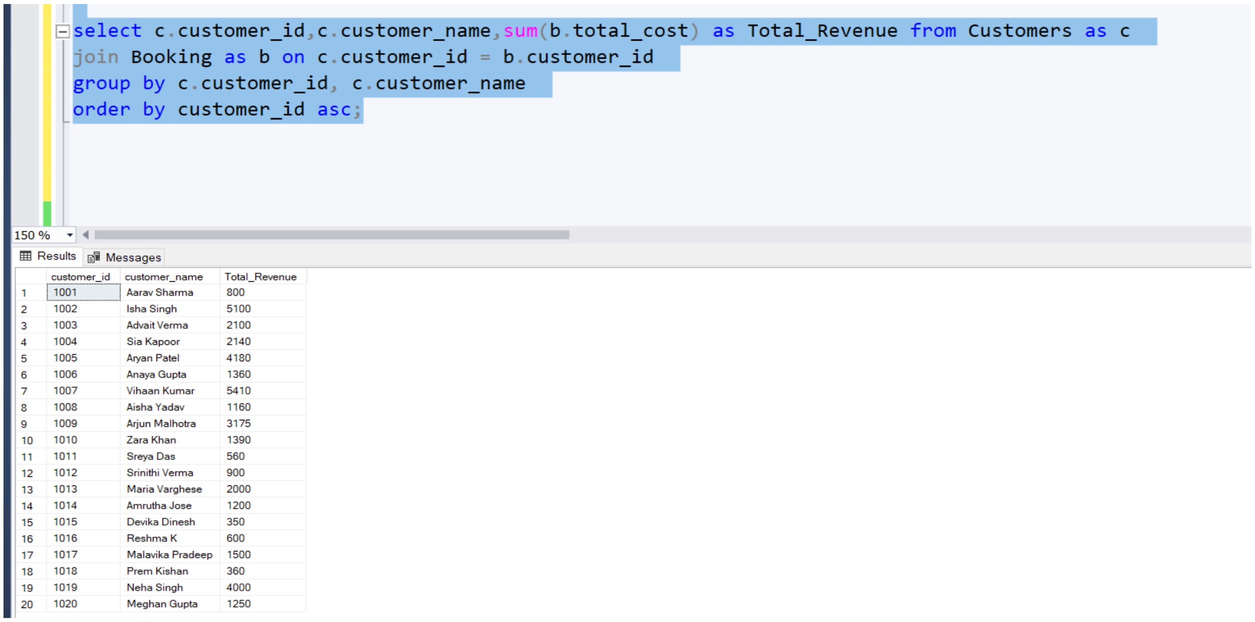
23) Write a SQL query to list users who have booked tickets for multiple events.



```sql
select c.customer_id,c.customer_name,count(b.event_id) as Number_of_Events_Booked from Customers c
join Booking as b on c.customer_id = b.customer_id
group by c.customer_id, c.customer_name
having count(b.event_id) > 1;
```

customer_id	customer_name	Number_of_Events_Booked

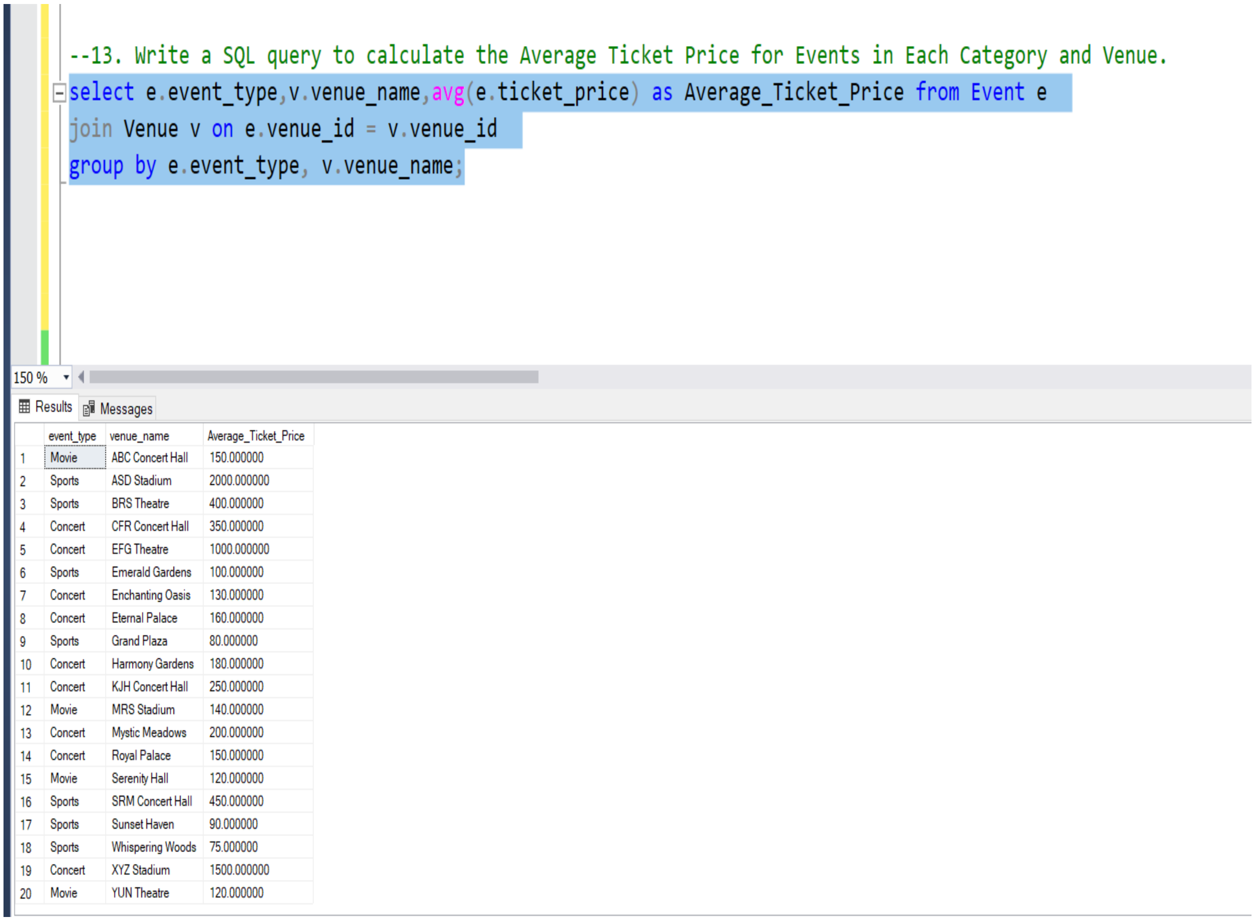
24) Write a SQL query to calculate the Total Revenue Generated by Events for Each User.



```sql
select c.customer_id,c.customer_name,sum(b.total_cost) as Total_Revenue from Customers as c
join Booking as b on c.customer_id = b.customer_id
group by c.customer_id, c.customer_name
order by customer_id asc;
```

	customer_id	customer_name	Total_Revenue
1	1001	Aarav Sharma	800
2	1002	Isha Singh	5100
3	1003	Advait Verma	2100
4	1004	Sia Kapoor	2140
5	1005	Aryan Patel	4180
6	1006	Anaya Gupta	1360
7	1007	Vihaan Kumar	5410
8	1008	Aisha Yadav	1160
9	1009	Arjun Malhotra	3175
10	1010	Zara Khan	1390
11	1011	Sreya Das	560
12	1012	Srinithi Verma	900
13	1013	Maria Varghese	2000
14	1014	Amrutha Jose	1200
15	1015	Devika Dinesh	350
16	1016	Reshma K	600
17	1017	Malavika Pradeep	1500
18	1018	Prem Kishan	360
19	1019	Neha Singh	4000
20	1020	Meghan Gupta	1250

25. Write a SQL query to calculate the Average Ticket Price for Events in Each Category and Venue.

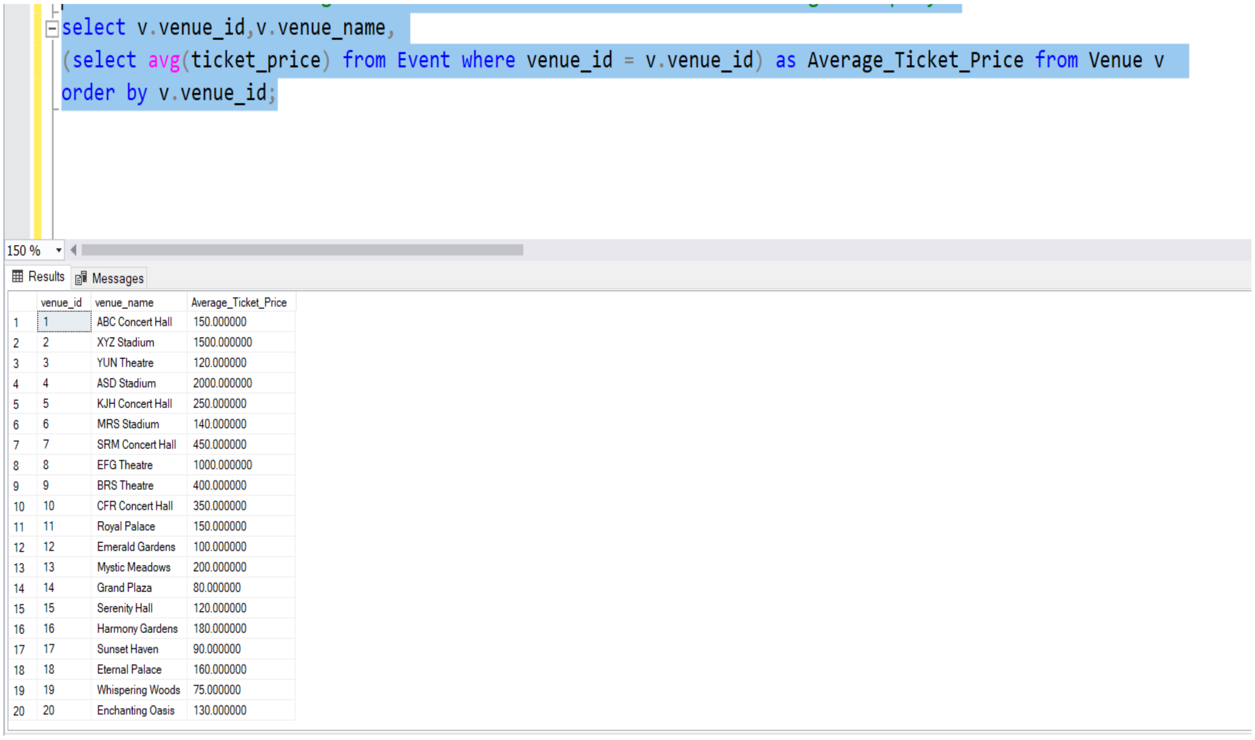


```
--13. Write a SQL query to calculate the Average Ticket Price for Events in Each Category and Venue.
select e.event_type,v.venue_name,avg(e.ticket_price) as Average_Ticket_Price from Event e
join Venue v on e.venue_id = v.venue_id
group by e.event_type, v.venue_name;
```

	event_type	venue_name	Average_Ticket_Price
1	Movie	ABC Concert Hall	150.000000
2	Sports	ASD Stadium	2000.000000
3	Sports	BRS Theatre	400.000000
4	Concert	CFR Concert Hall	350.000000
5	Concert	EFG Theatre	1000.000000
6	Sports	Emerald Gardens	100.000000
7	Concert	Enchanting Oasis	130.000000
8	Concert	Eternal Palace	160.000000
9	Sports	Grand Plaza	80.000000
10	Concert	Harmony Gardens	180.000000
11	Concert	KJH Concert Hall	250.000000
12	Movie	MRS Stadium	140.000000
13	Concert	Mystic Meadows	200.000000
14	Concert	Royal Palace	150.000000
15	Movie	Serenity Hall	120.000000
16	Sports	SRM Concert Hall	450.000000
17	Sports	Sunset Haven	90.000000
18	Sports	Whispering Woods	75.000000
19	Concert	XYZ Stadium	1500.000000
20	Movie	YUN Theatre	120.000000

--TASK 4-----------------------------------

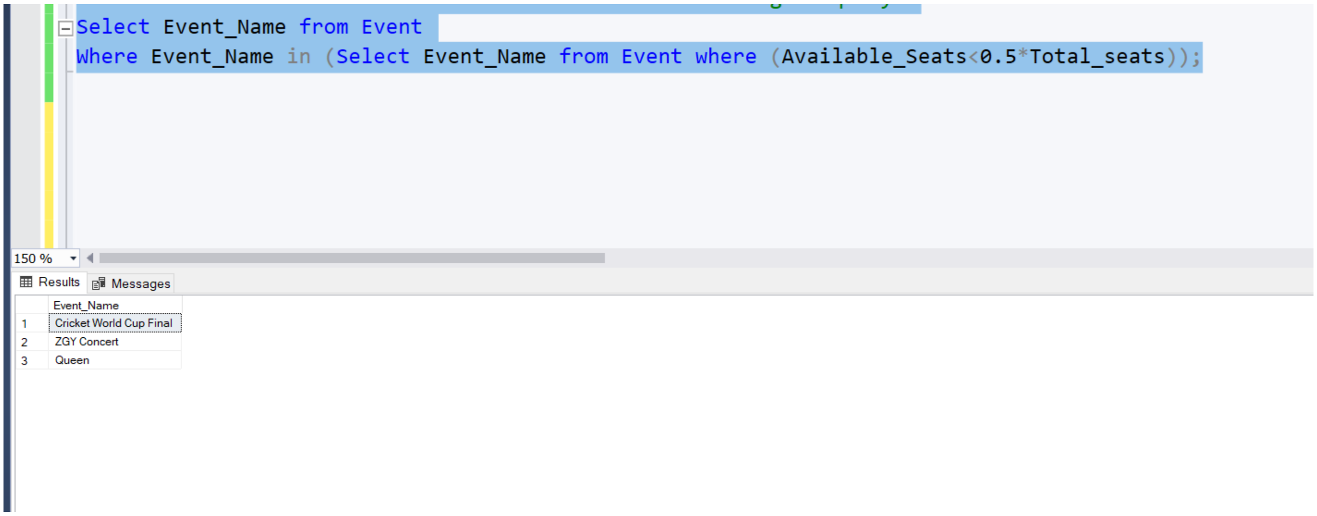
26)Calculate the Average Ticket Price for Events in Each Venue Using a Subquery.



```
select v.venue_id,v.venue_name,
(select avg(ticket_price) from Event where venue_id = v.venue_id) as Average_Ticket_Price from Venue v
order by v.venue_id;
```

	venue_id	venue_name	Average_Ticket_Price
1	1	ABC Concert Hall	150.000000
2	2	XYZ Stadium	1500.000000
3	3	YUN Theatre	120.000000
4	4	ASD Stadium	2000.000000
5	5	KJH Concert Hall	250.000000
6	6	MRS Stadium	140.000000
7	7	SRM Concert Hall	450.000000
8	8	EFG Theatre	1000.000000
9	9	BRS Theatre	400.000000
10	10	CFR Concert Hall	350.000000
11	11	Royal Palace	150.000000
12	12	Emerald Gardens	100.000000
13	13	Mystic Meadows	200.000000
14	14	Grand Plaza	80.000000
15	15	Serenity Hall	120.000000
16	16	Harmony Gardens	180.000000
17	17	Sunset Haven	90.000000
18	18	Eternal Palace	160.000000
19	19	Whispering Woods	75.000000
20	20	Enchanting Oasis	130.000000

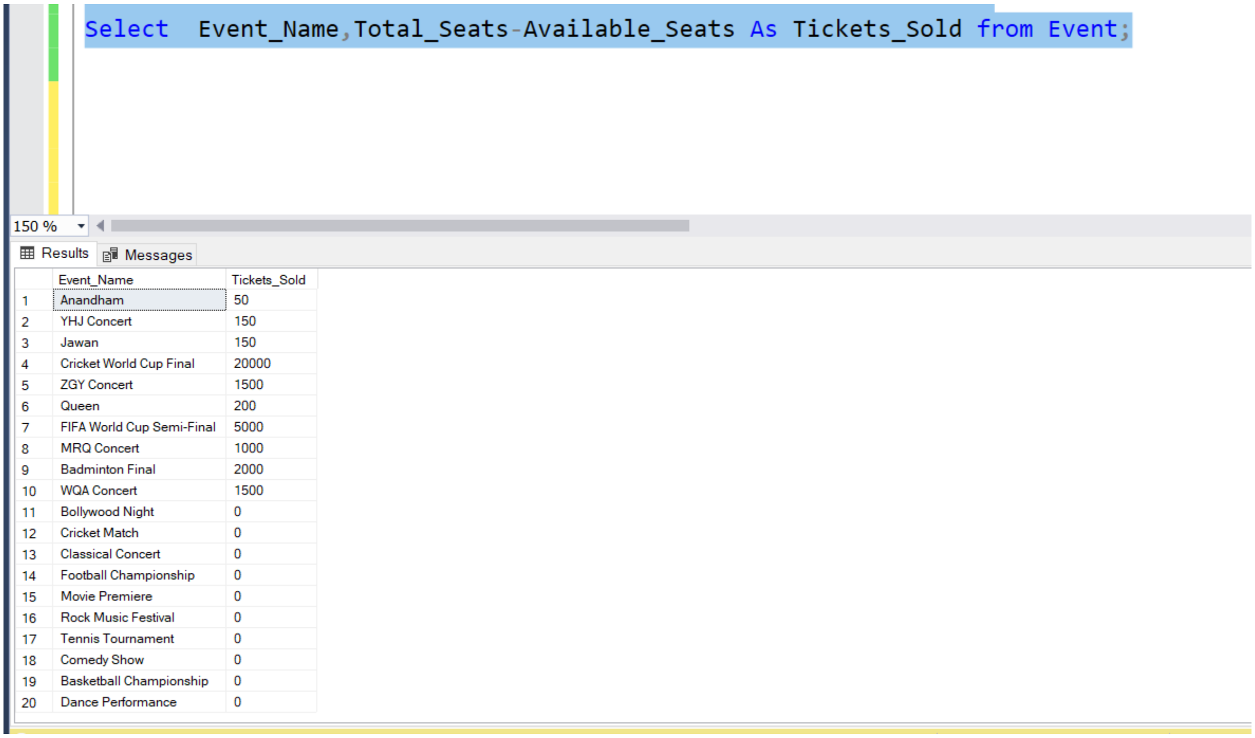
27)Find Events with More Than 50% of Tickets Sold using subquery.



```
Select Event_Name from Event
Where Event_Name in (Select Event_Name from Event where (Available_Seats<0.5*Total_seats));
```

	Event_Name
1	Cricket World Cup Final
2	ZGY Concert
3	Queen

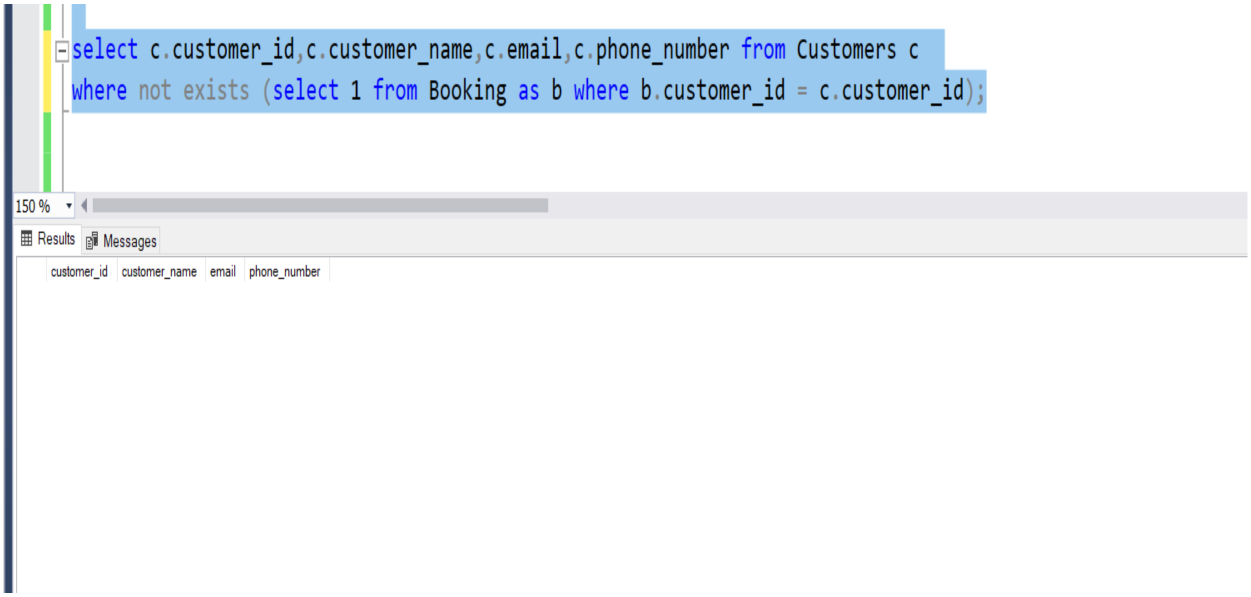
26)Calculate the Total Number of Tickets Sold for Each Event.



```
Select  Event_Name,Total_Seats-Available_Seats As Tickets_Sold from Event;
```

	Event_Name	Tickets_Sold
1	Anandham	50
2	YHJ Concert	150
3	Jawan	150
4	Cricket World Cup Final	20000
5	ZGY Concert	1500
6	Queen	200
7	FIFA World Cup Semi-Final	5000
8	MRQ Concert	1000
9	Badminton Final	2000
10	WQA Concert	1500
11	Bollywood Night	0
12	Cricket Match	0
13	Classical Concert	0
14	Football Championship	0
15	Movie Premiere	0
16	Rock Music Festival	0
17	Tennis Tournament	0
18	Comedy Show	0
19	Basketball Championship	0
20	Dance Performance	0

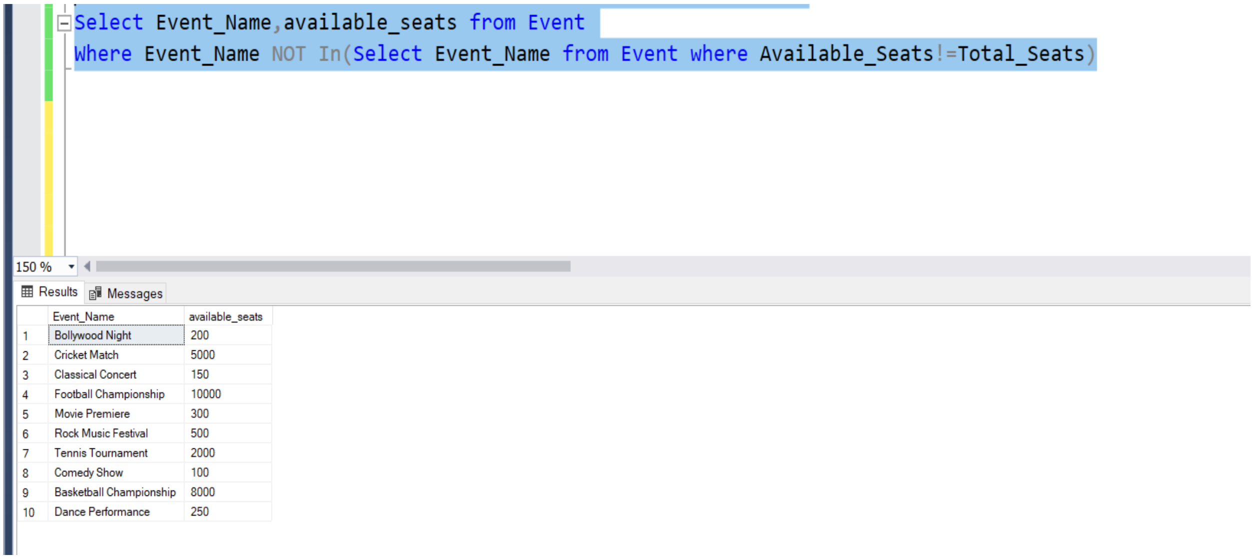
27) . Find Users Who Have Not Booked Any Tickets Using a NOT EXISTS Subquery.



```
select c.customer_id,c.customer_name,c.email,c.phone_number from Customers c
where not exists (select 1 from Booking as b where b.customer_id = c.customer_id);
```

customer_id	customer_name	email	phone_number

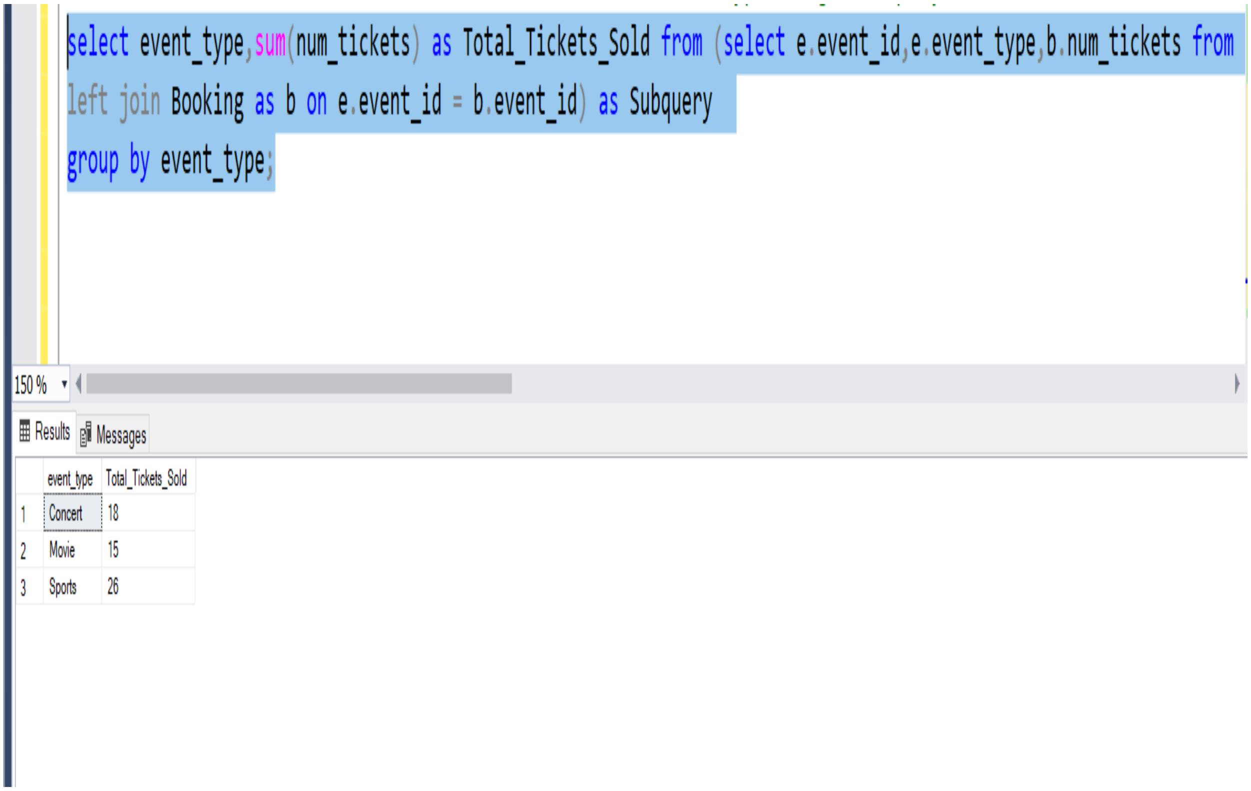
28)List Events with No Ticket Sales Using a NOT IN Subquery.



```sql
Select Event_Name,available_seats from Event
Where Event_Name NOT In(Select Event_Name from Event where Available_Seats!=Total_Seats)
```

	Event_Name	available_seats
1	Bollywood Night	200
2	Cricket Match	5000
3	Classical Concert	150
4	Football Championship	10000
5	Movie Premiere	300
6	Rock Music Festival	500
7	Tennis Tournament	2000
8	Comedy Show	100
9	Basketball Championship	8000
10	Dance Performance	250

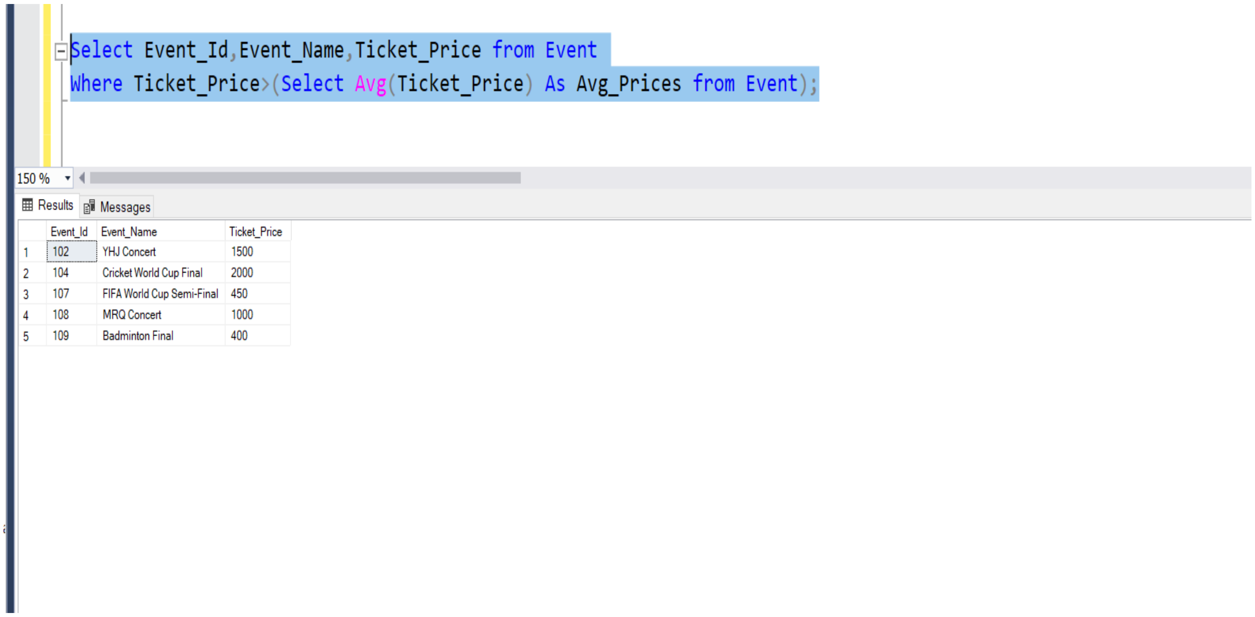
29)Calculate the Total Number of Tickets Sold for Each Event Type Using a Subquery in the FROM Clause.



```sql
select event_type,sum(num_tickets) as Total_Tickets_Sold from (select e.event_id,e.event_type,b.num_tickets from
left join Booking as b on e.event_id = b.event_id) as Subquery
group by event_type;
```

	event_type	Total_Tickets_Sold
1	Concert	18
2	Movie	15
3	Sports	26

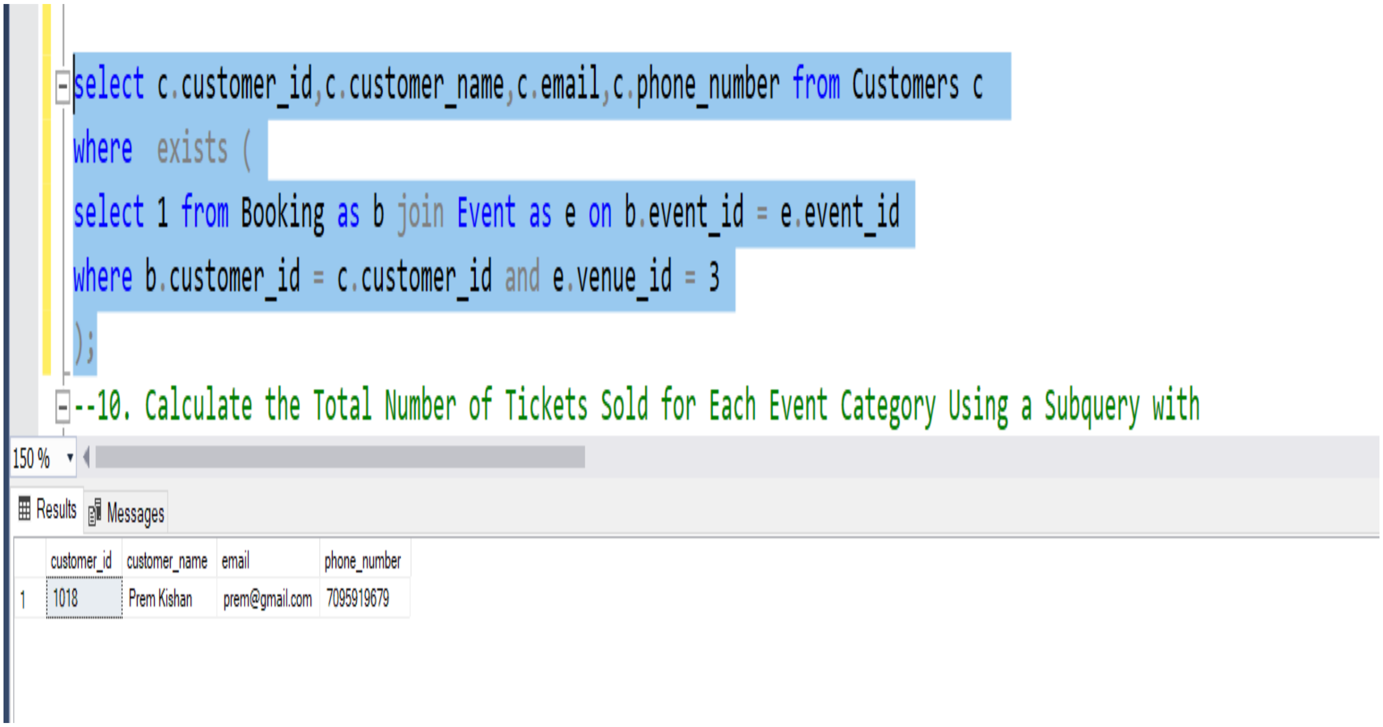
30) Find Events with Ticket Prices Higher Than the Average Ticket Price Using a Subquery in the WHERE Clause.



```
Select Event_Id,Event_Name,Ticket_Price from Event
Where Ticket_Price>(Select Avg(Ticket_Price) As Avg_Prices from Event);
```

	Event_Id	Event_Name	Ticket_Price
1	102	YHJ Concert	1500
2	104	Cricket World Cup Final	2000
3	107	FIFA World Cup Semi-Final	450
4	108	MRQ Concert	1000
5	109	Badminton Final	400

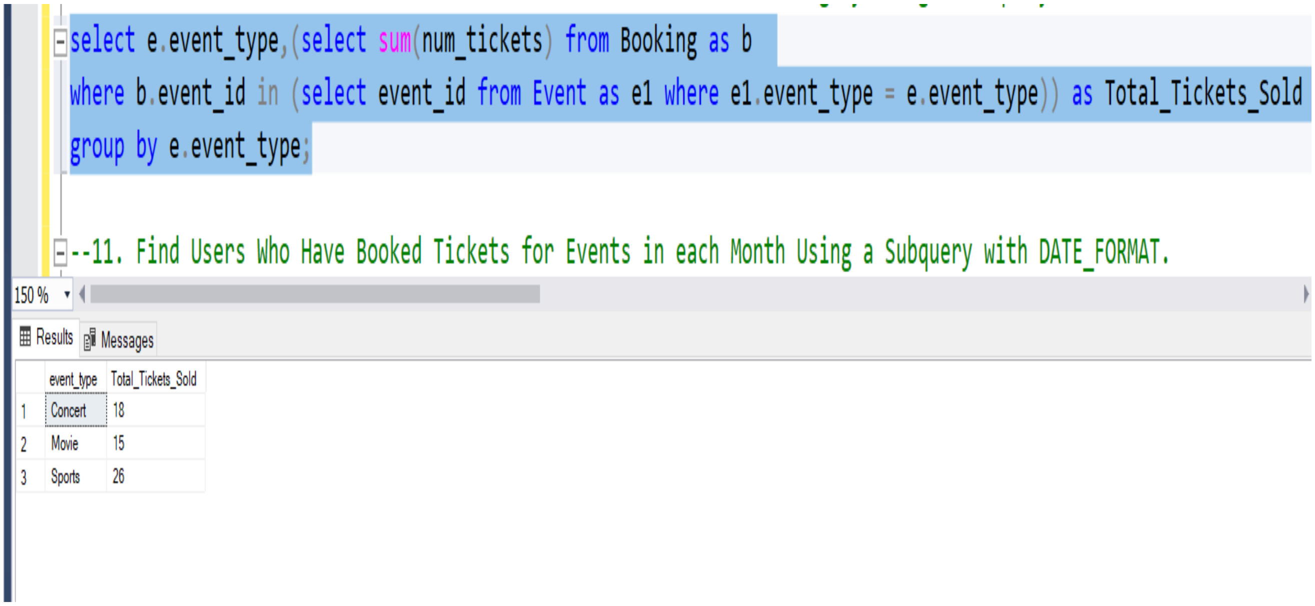
31) List Users Who Have Booked Tickets for Events in a Given Venue Using a Subquery in the WHERE Clause.



```
select c.customer_id,c.customer_name,c.email,c.phone_number from Customers c
where  exists (
select 1 from Booking as b join Event as e on b.event_id = e.event_id
where b.customer_id = c.customer_id and e.venue_id = 3
);
--10. Calculate the Total Number of Tickets Sold for Each Event Category Using a Subquery with
```

	customer_id	customer_name	email	phone_number
1	1018	Prem Kishan	prem@gmail.com	7095919679

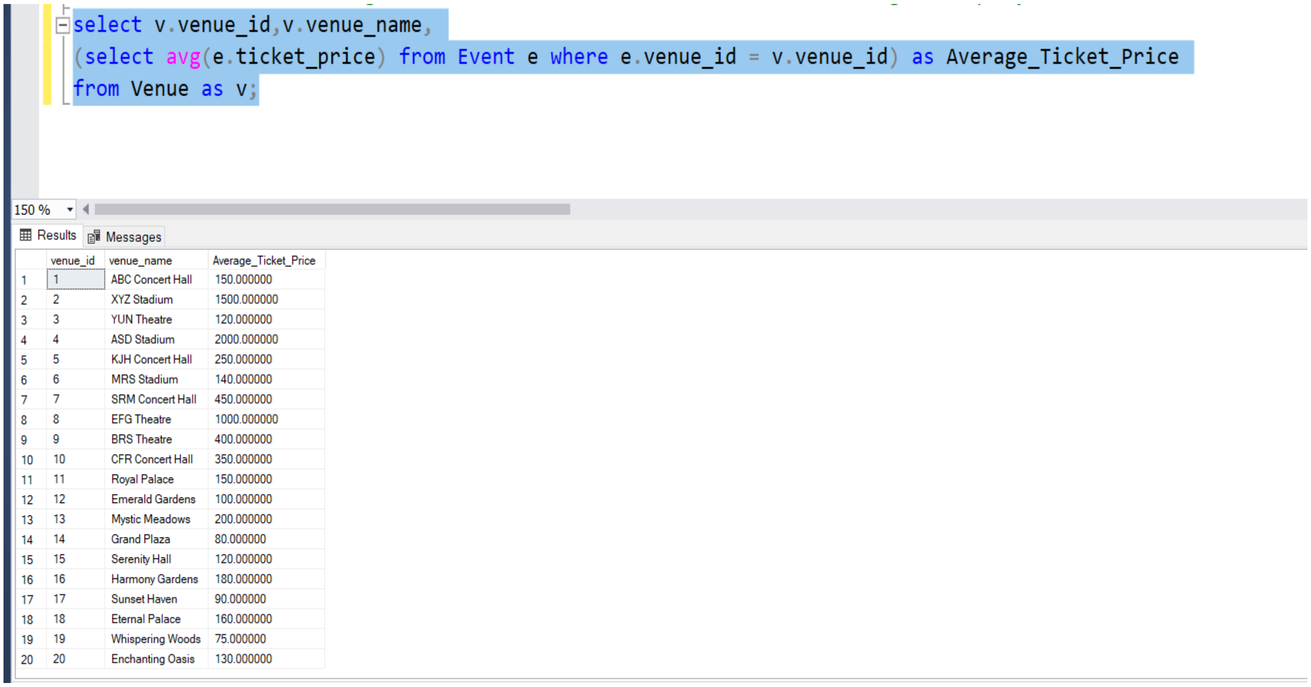
32. Calculate the Total Number of Tickets Sold for Each Event Category Using a Subquery with GROUP BY.



```
select e.event_type,(select sum(num_tickets) from Booking as b
where b.event_id in (select event_id from Event as e1 where e1.event_type = e.event_type)) as Total_Tickets_Sold
group by e.event_type;

--11. Find Users Who Have Booked Tickets for Events in each Month Using a Subquery with DATE_FORMAT.
```

	event_type	Total_Tickets_Sold
1	Concert	18
2	Movie	15
3	Sports	26

33. Calculate the Average Ticket Price for Events in Each Venue Using a Subquery



```
select v.venue_id,v.venue_name,
(select avg(e.ticket_price) from Event e where e.venue_id = v.venue_id) as Average_Ticket_Price
from Venue as v;
```

	venue_id	venue_name	Average_Ticket_Price
1	1	ABC Concert Hall	150.000000
2	2	XYZ Stadium	1500.000000
3	3	YUN Theatre	120.000000
4	4	ASD Stadium	2000.000000
5	5	KJH Concert Hall	250.000000
6	6	MRS Stadium	140.000000
7	7	SRM Concert Hall	450.000000
8	8	EFG Theatre	1000.000000
9	9	BRS Theatre	400.000000
10	10	CFR Concert Hall	350.000000
11	11	Royal Palace	150.000000
12	12	Emerald Gardens	100.000000
13	13	Mystic Meadows	200.000000
14	14	Grand Plaza	80.000000
15	15	Serenity Hall	120.000000
16	16	Harmony Gardens	180.000000
17	17	Sunset Haven	90.000000
18	18	Eternal Palace	160.000000
19	19	Whispering Woods	75.000000
20	20	Enchanting Oasis	130.000000