**American International University-Bangladesh (AIUB)**

Title : **Travel Agency Management System**

Course : Introduction to Database

Section : **F**

Submitted To : Rifat Tasnim Anannya

Submitted By :

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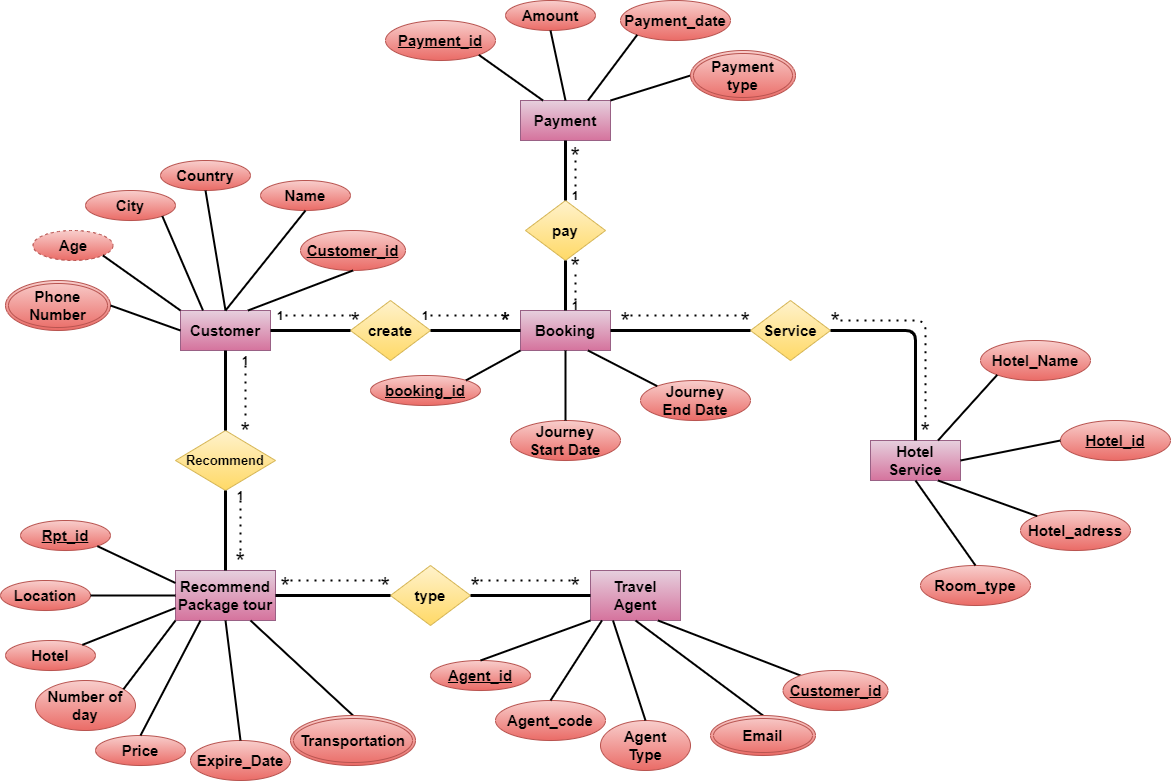
**Travel Agency Management System**

* **Nearly everyone goes on a vacation, for this *Travel agency management system* would play a vital role in planning a perfect trip.**
* **The main purpose is to *help tourism companies to manage its customers and trips*.**

**Description of Travel Agency Management System:**

* Customer are identified by their customer ID, Name, address, age and phone number. Customer name contains first name and last name. Address contains the country and city for the customer .
* Booking entity are identified by the booking id, journey start date and journey end date attributes.
* A Hotel contains with it’s name, Id, address and room. In hotel there are two types of room like: single room and multi room.
* Payment are uniquely identified by the payment id, amount, payment date and type of payment.
* Recommended package tour will be uniquely identified with the rpt Id, location, hotel, number of days, price, expire date and transportation.
* Travel agent have their agent id, agent code, flight, car and bus. So, that they can easily maintain their agency.

**ER-Diagram:**



**Travel Agency Management System entities and their attributes:**

**Customer Entity:** Attributes of Name, Customer\_id, Country, City, Age, Phone\_Number.

**Booking Entity:** Attributes of Booking\_id, Journey\_Start\_Date,

Journey\_End\_Date.

**Hotel\_Service Entity:** Attributes of Hotel\_Name, Hotel\_id, Hotel\_adress, Room\_type.

**Payment Entity:** Attributes of Payment\_id, Amount, Payment\_date, Payment\_type.

**Recommend\_Package\_tour Entity:** Attributes of Rpt\_id, Location, Hotel, Number\_of\_day, Price, Expire\_Date, Transportation.

**Travel\_Agent Entity:** Attributes of Agent\_id, Agent\_code, Agent\_type, Email,

Customer\_id.

**Normalization**

**Green** for **Primary Key**

**Red** for Foreign key

**Create:**

(Customer\_id, Name, Country, City, Age, Phone\_Number, Booking\_id,

Journey\_Start\_Date, Journey \_End\_Date)

**1NF**:

Phone number is a multivalued attribute.

**2NF**:

Customer\_id, Name, Country, City, Age, Phone\_Number

Booking\_id, Journey\_Start\_Date, Journey\_End\_Date

**3NF**:

Customer\_id, Name, Age, Phone\_Number

Country \_id, Country, City

Booking\_id, Journey\_Start\_Date, Journey\_End\_Date

**Table from Create:**

1. Customer\_id, Name, Age, Country\_id,
2. Country\_id, Country, City
3. Customer\_id, Phone\_Number (composite primary key)
4. Booking\_id, Journey\_Start\_Date, Journey\_End\_Date, Customer\_id

**Service:**

(Booking\_id, Journey\_Start\_Date, Journey\_End\_Date, Hotel\_id, Hotel\_Name, Hotel\_adress, Room\_type)

**1NF:**

No Multi valued attribute.

**2NF:**

Booking\_id, Journey\_Start\_Date, journey\_End\_Date

Hotel\_id, Hotel\_Name, Hotel\_adress, Room\_type

**3NF:**

Booking\_id, Journey\_Start\_Date, Journey\_End\_Date

Hotel\_id, Hotel\_Name, Hotel\_adress, Room\_type

**Table from Service:**

1. Booking\_id, Journey\_Start\_Date, Journey\_End\_Date
2. Hotel\_id, Hotel\_Name, Hotel\_adress, Room\_type, Booking\_id

**Pay:**

(Booking\_id, Journey\_Start\_Date, Journey\_End\_Date, Payment\_id, Amount, Payment\_date, Payment\_type)

**1NF:**

Payment type is a multivalued attribute.

**2NF:**

Booking\_id, Journey\_Start\_Date, Journey\_End\_Date

Payment\_id, Amount, Payment\_date, Payment\_type

**3NF:**

Booking\_id, Journey\_Start\_Date, Journey\_End\_Date

Payment\_id, Amount, Payment\_date, Payment\_type

**Table from Pay:**

1. Booking\_id, Journey\_Start\_Date, Journey\_End\_Date
2. Payment\_id, Amount, Payment\_date, Payment\_type, Booking\_id
3. Payment\_id, Payment\_type (composite primary key)

**Recommend:**

(Customer\_id, Name, Country, City, Age, Phone\_Number, Rpt\_id, Location, Hotel, Number\_of\_day, Price, Expire\_Date, Transportation)

**1NF:**

Phone number and transportation are a multivalued attribute.

**2NF:**

Customer\_id, Name, Country, City, Age, Phone\_Number

Rpt\_id, Location, Hotel, Number\_of\_day, Price, Expire\_Date, Transportation

**3NF:**

Customer\_id, Name, Age, Phone\_Number

C\_id, Country, City

Rpt\_id, Location, Hotel, Number\_of\_day, Price, Expire\_Date, Transportation

**Table from Recommend:**

1. Customer\_id, Name, Age, Country\_id
2. Country\_id, Country, City
3. Customer\_id, Phone\_Number (composite primary key)
4. Rpt\_id, Location, Hotel, Number\_of\_day, Price, Expire\_Date, Customer\_id
5. Rpt\_id, Transportation (composite primary key)

**Type:**

(Rpt\_id, Location, Hotel, Number\_of\_day, Price, Expire\_Date, Transportation,

Agent\_id, Agent\_code, Agent\_type, Email, customer\_id)

**1NF:**

Transportation and Email are a multivalued attribute.

**2NF:**

Rpt\_id, Location, Hotel, Number\_of\_day, Price, Expire\_Date, Transportation

Agent\_id, Agent\_code, Agent\_type, Email, customer\_id

**3NF:**

Rpt\_id, Location, Hotel, Number\_of\_day, Price, Expire\_Date, Transportation

Agent\_id, Agent\_code, Agent\_type, Email, customer\_id

**Table from Type:**

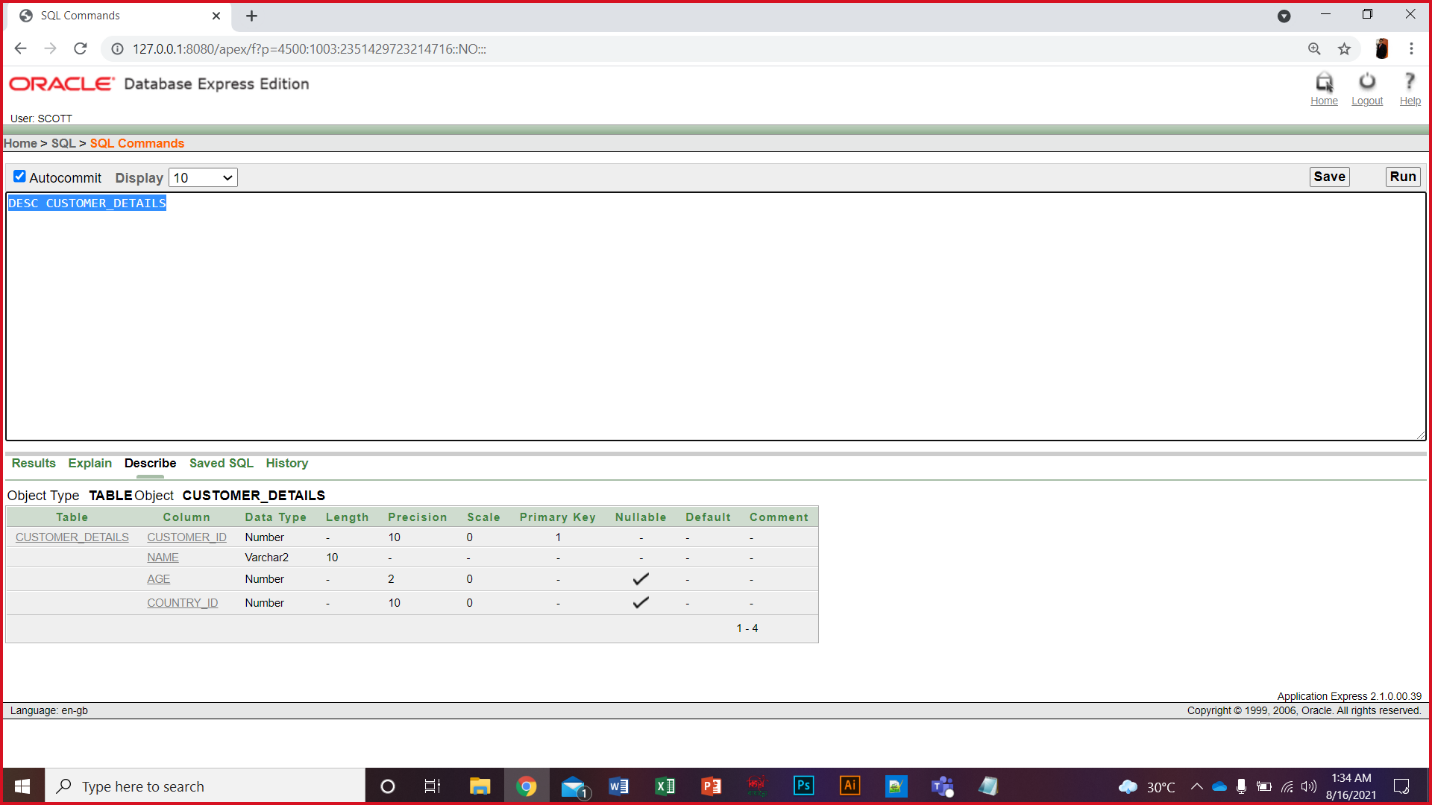
1. Rpt\_id, Location, Hotel, Number\_of\_day, Price, Expire\_Date,
2. Rpt\_id, Transportation (composite primary key)
3. Agent\_id, Agent\_code, Agent\_type, customer\_id, Rpt\_id
4. Agent\_id, Email

**Tables**

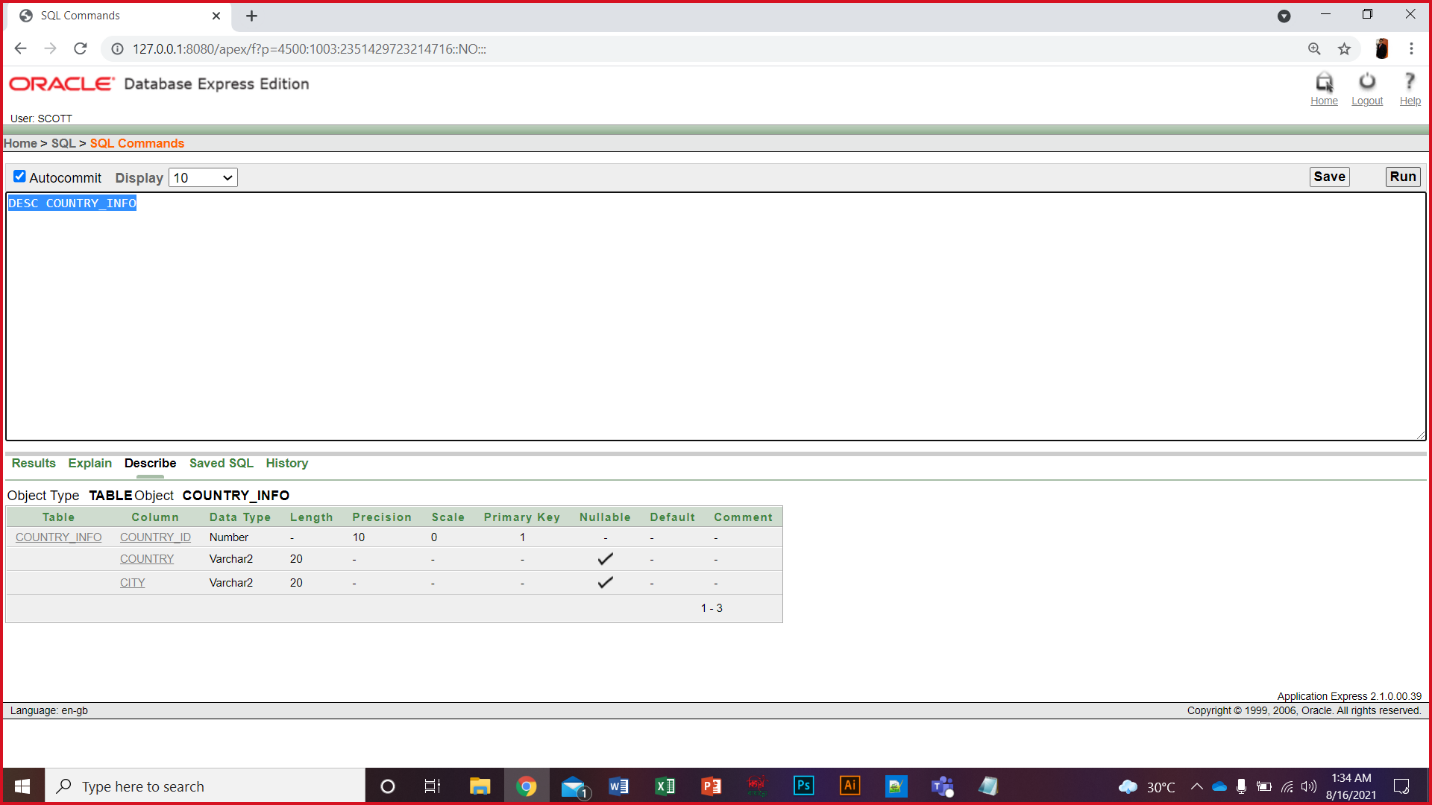
1. Customer\_id, Name, Age, Country\_id 🡪 **Customer\_Details**
2. Country\_id, Country, City 🡪 **Country\_Information**
3. Customer\_id, Phone\_Number (composite primary key) 🡪 **Customer\_Contact\_Details**
4. Booking\_id, Journey\_Start\_Date, Journey\_End\_Date, Customer\_id 🡪 **Booking\_Details**
5. Hotel\_id, Hotel\_Name, Hotel\_adress, Room\_type, Booking\_id 🡪 **Hotel\_Information**
6. Payment\_id, Amount, Payment\_date, Booking\_id 🡪 **Payment\_Information**
7. Payment\_id, Payment\_type (composite primary key) 🡪 **Payment\_Type\_Detials**
8. Rpt\_id, Location, Hotel, Number\_of\_day, Price, Expire\_Date, Customer\_id 🡪 **Recommend\_package\_tour\_Information**
9. Rpt\_id, Transportation (composite primary key) 🡪 **Recommend\_Transportation\_Information**
10. Agent\_id, Agent\_code, Agent\_Type, Rpt\_id, Customer\_id 🡪**Agent\_Details**
11. Agent\_id, Email (composite primary key) 🡪 **Agent\_Email\_Details**

**Table Creation:**

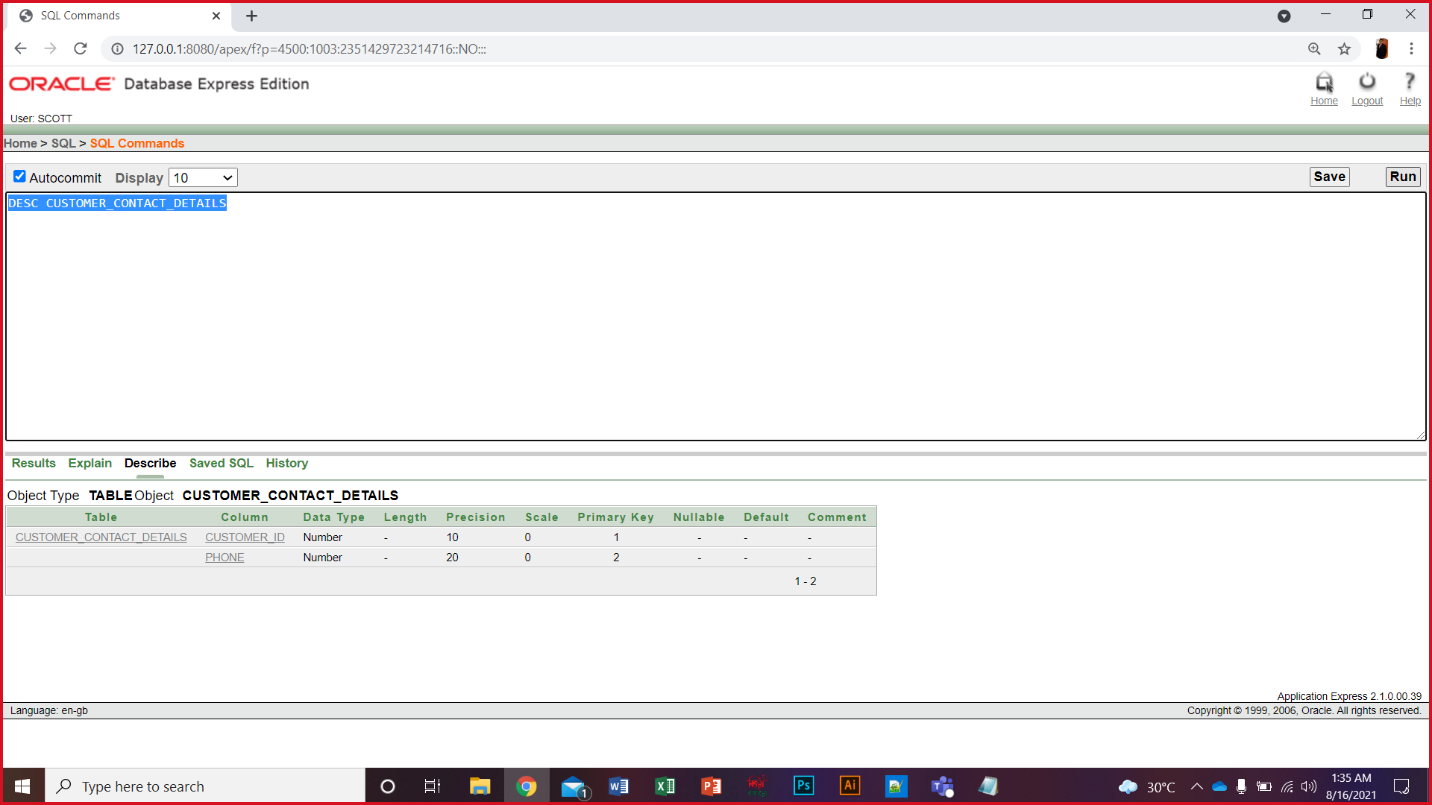
1. Customer\_id, Name, Age, Country\_id 🡪 **Customer\_Details**



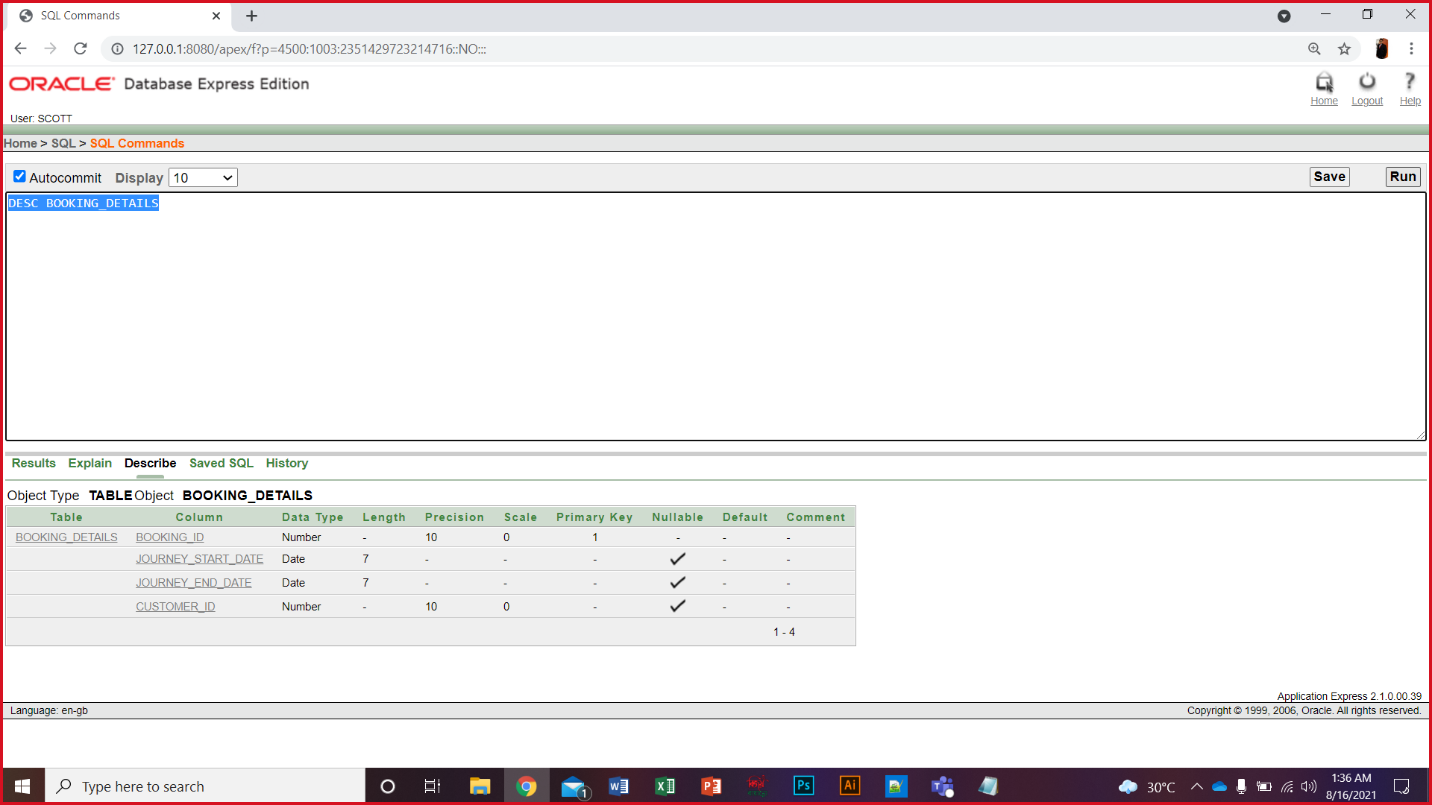
1. Country\_id, Country, City 🡪 **Country\_Information**



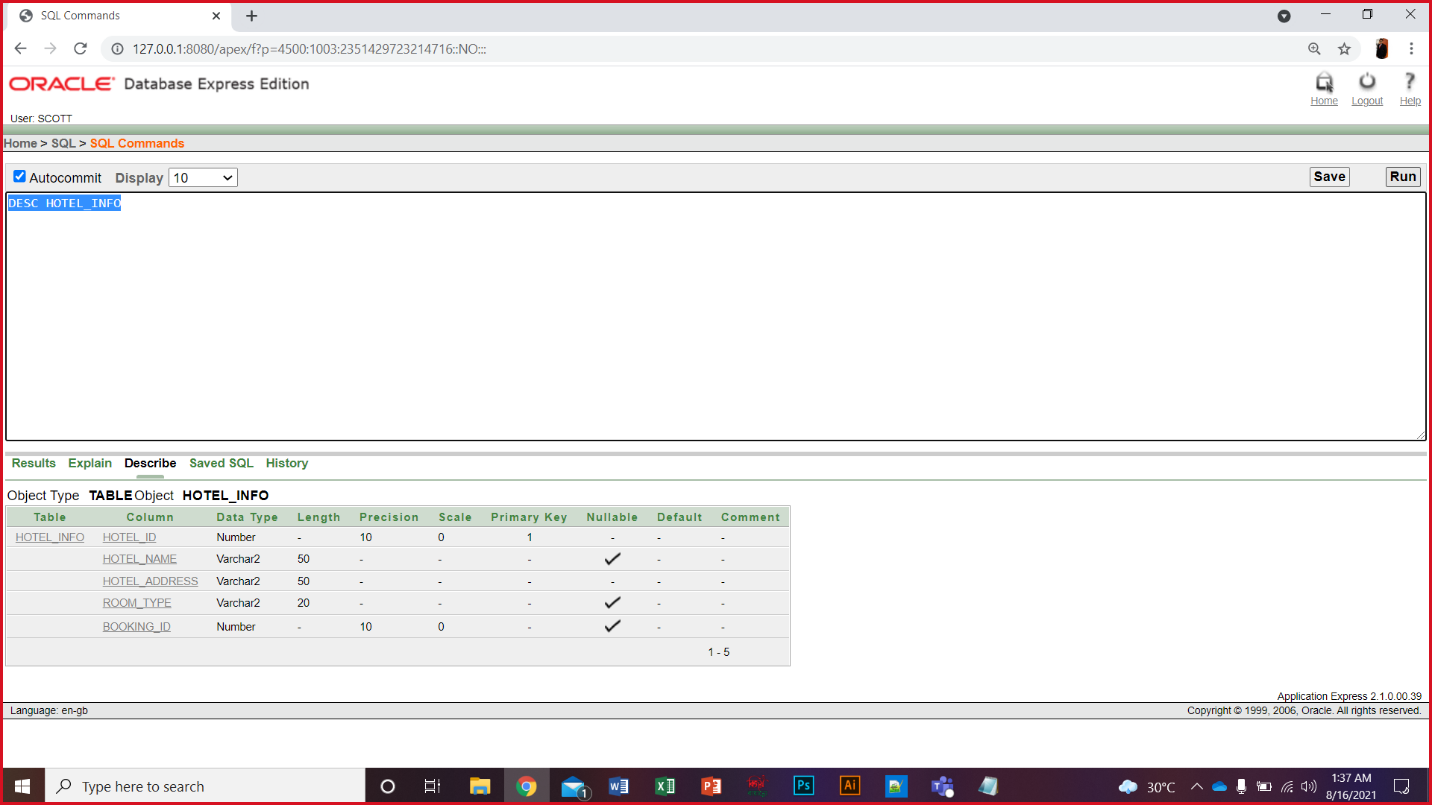
1. Customer\_id, Phone\_Number (composite primary key) 🡪 **Customer\_Contact\_Details**



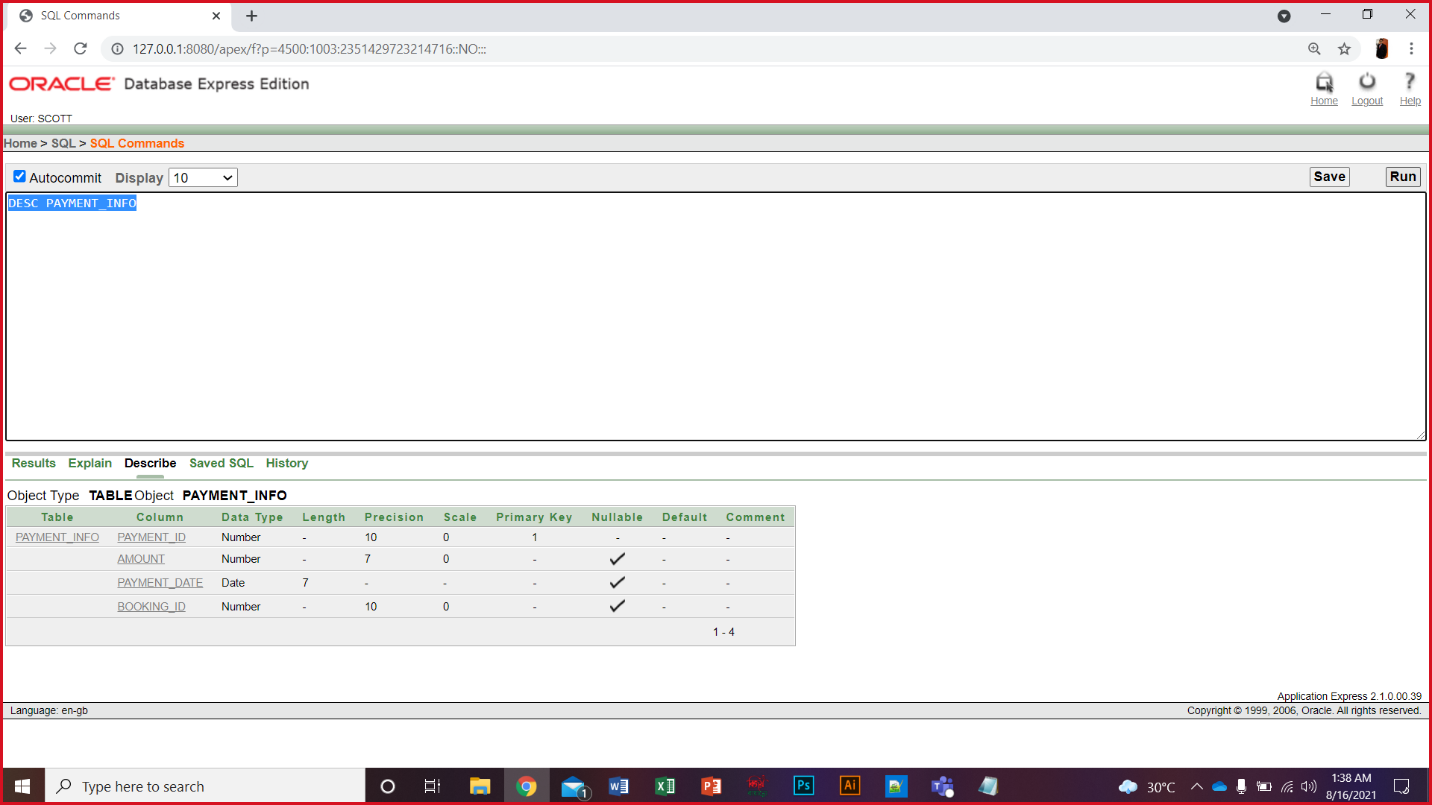
1. Booking\_id, Journey\_Start\_Date, Journey\_End\_Date, Customer\_id 🡪 **Booking\_Details**



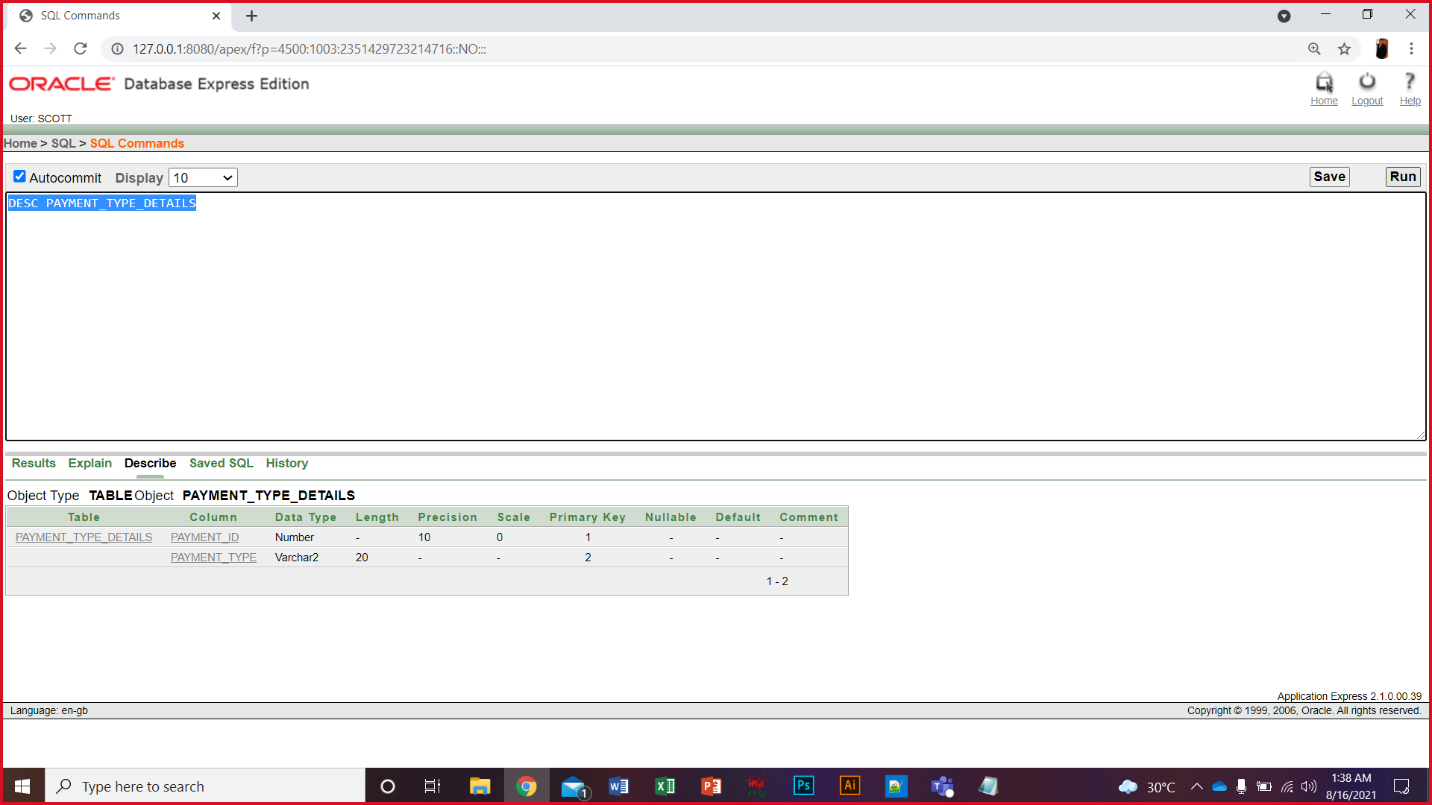
1. Hotel\_id, Hotel\_Name, Hotel\_adress, Room\_type, Booking\_id 🡪 **Hotel\_Information**



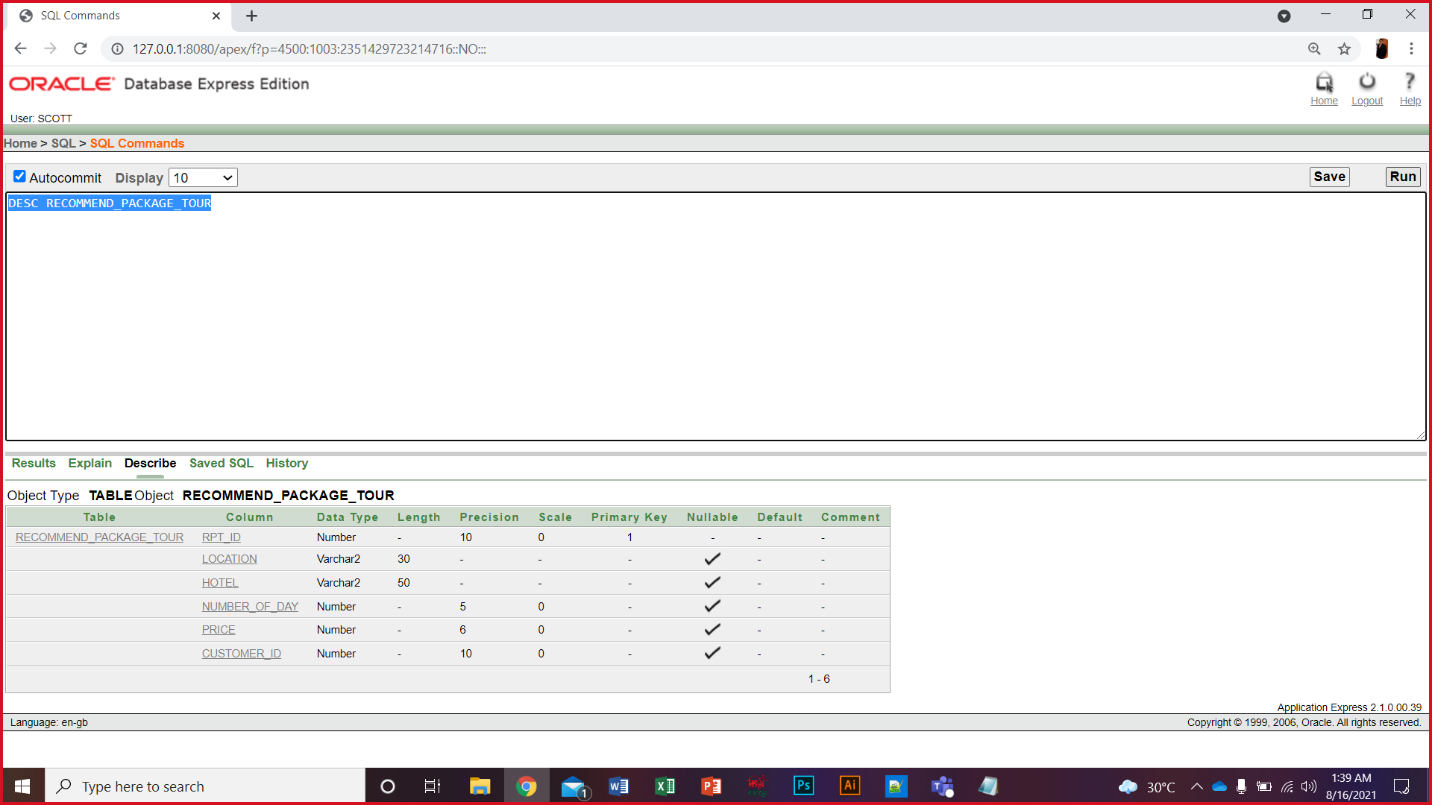
1. Payment\_id, Amount, Payment\_date, Booking\_id 🡪 **Payment\_Information**



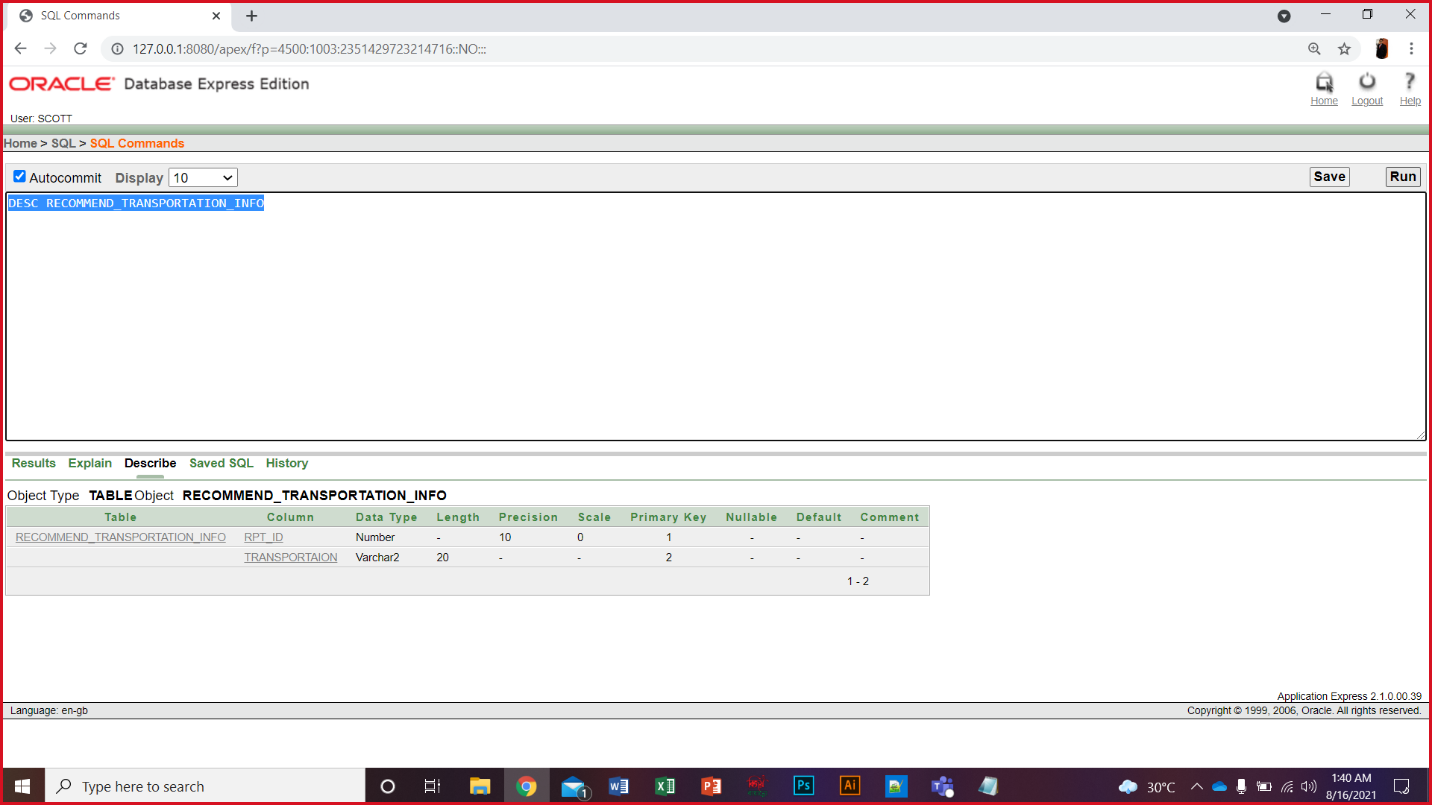
1. Payment\_id, Payment\_type (composite primary key) 🡪 **Payment\_Type\_Detials**



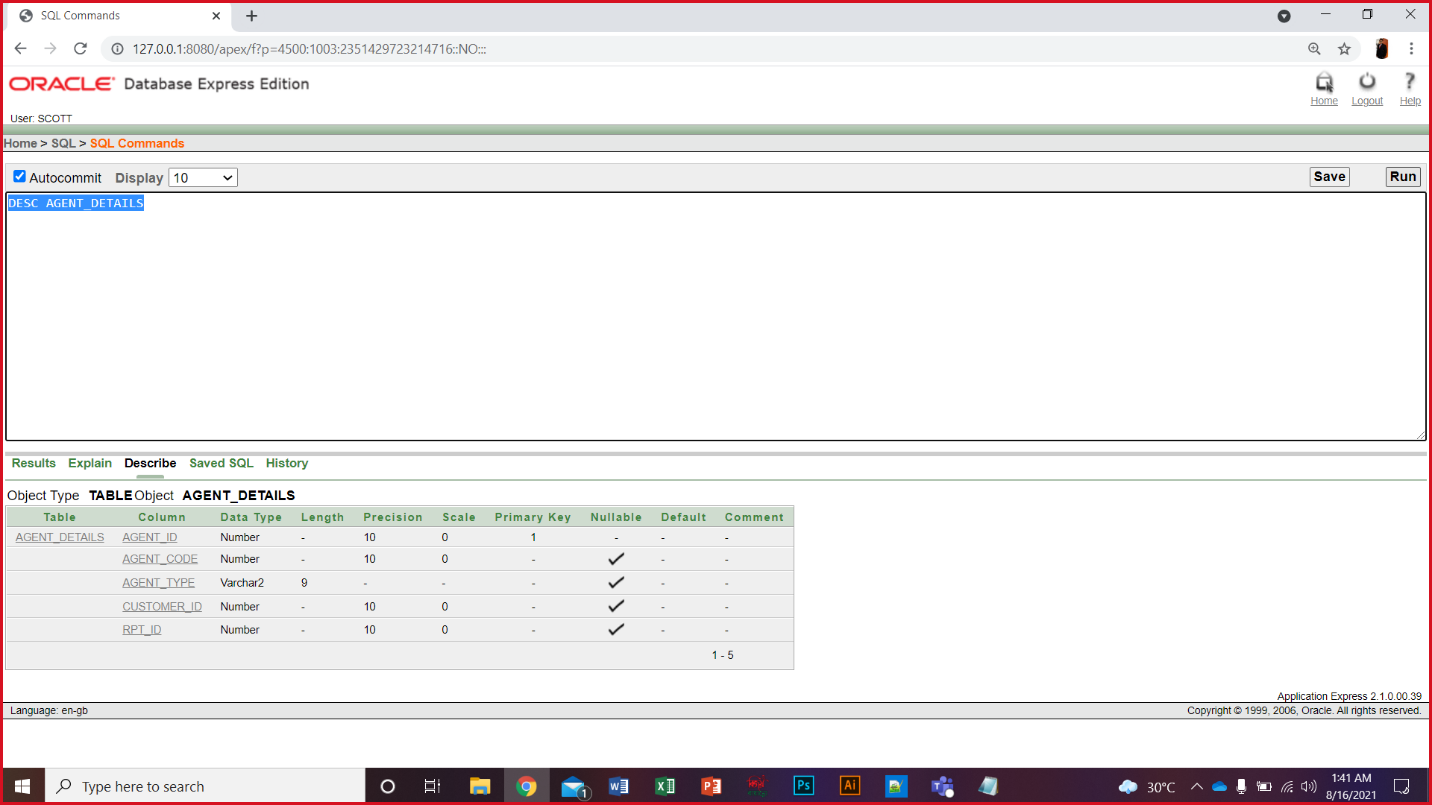
1. Rpt\_id, Location, Hotel, Number\_of\_day, Price, Expire\_Date, Customer\_id 🡪 **Recommend\_package\_tour\_Information**



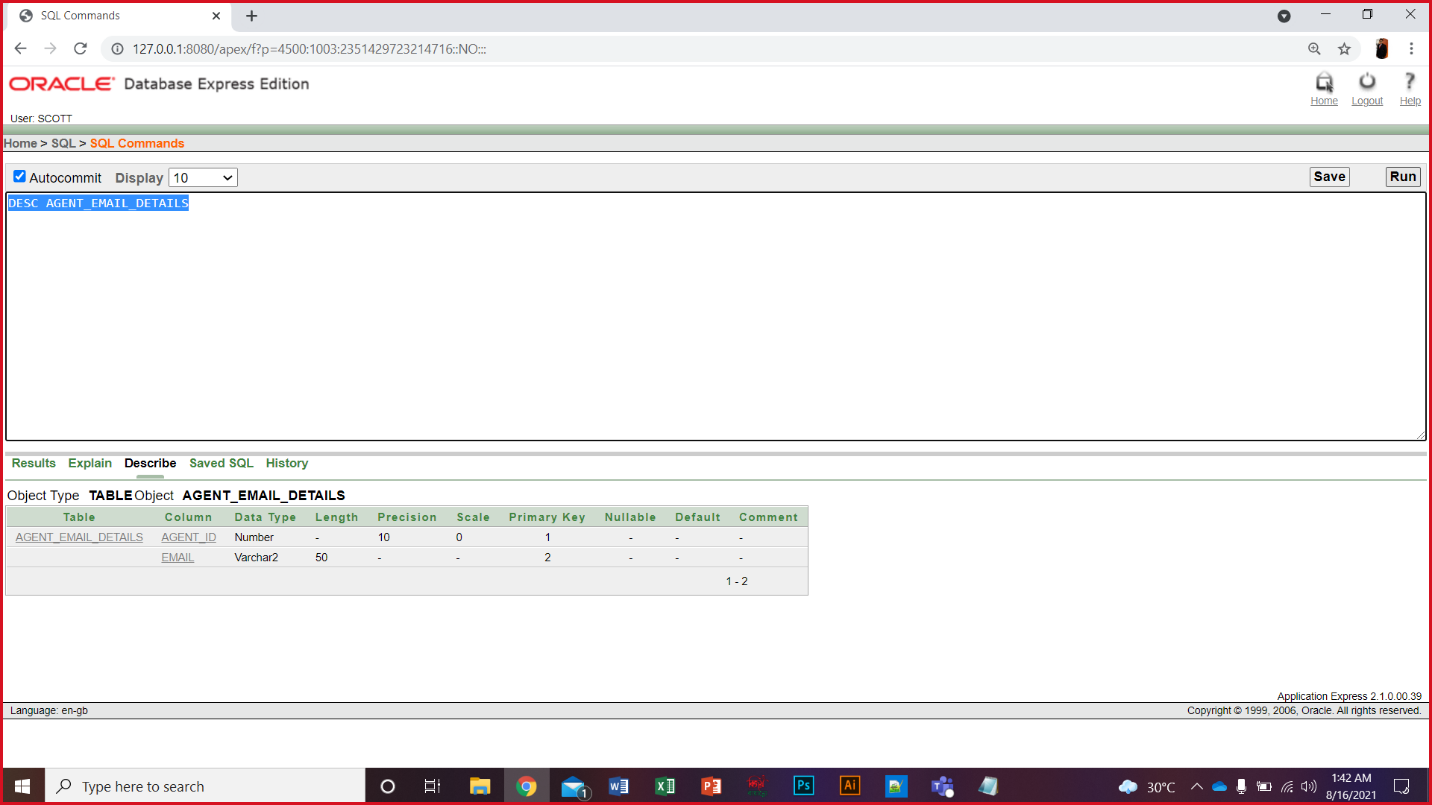
1. Rpt\_id, Transportation (composite primary key) 🡪 **Recommend\_Transportation\_Information**



1. Agent\_id, Agent\_code, Agent\_Type, Rpt\_id, Customer\_id 🡪**Agent\_Details**

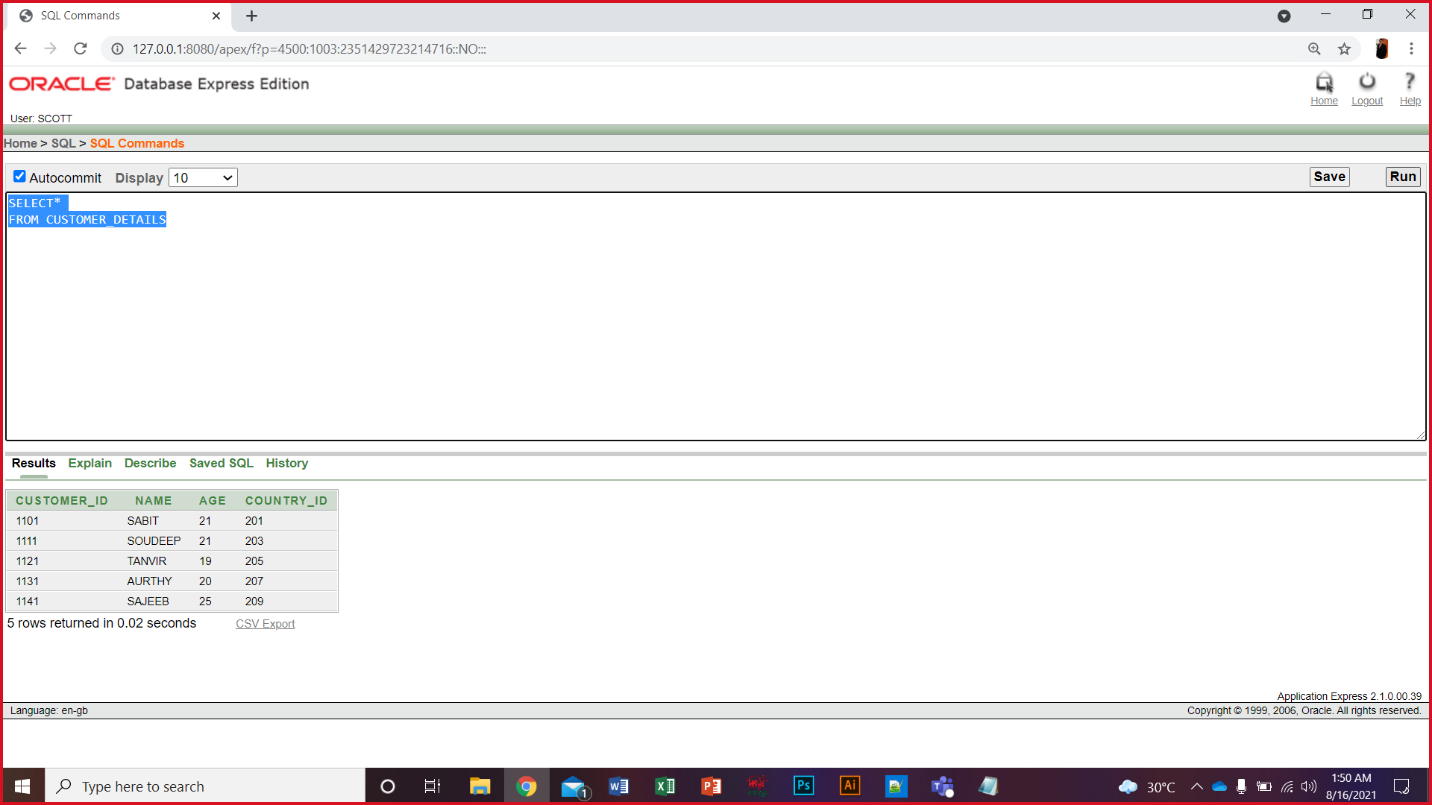


1. Agent\_id, Email (composite primary key) 🡪 **Agent\_Email\_Details**

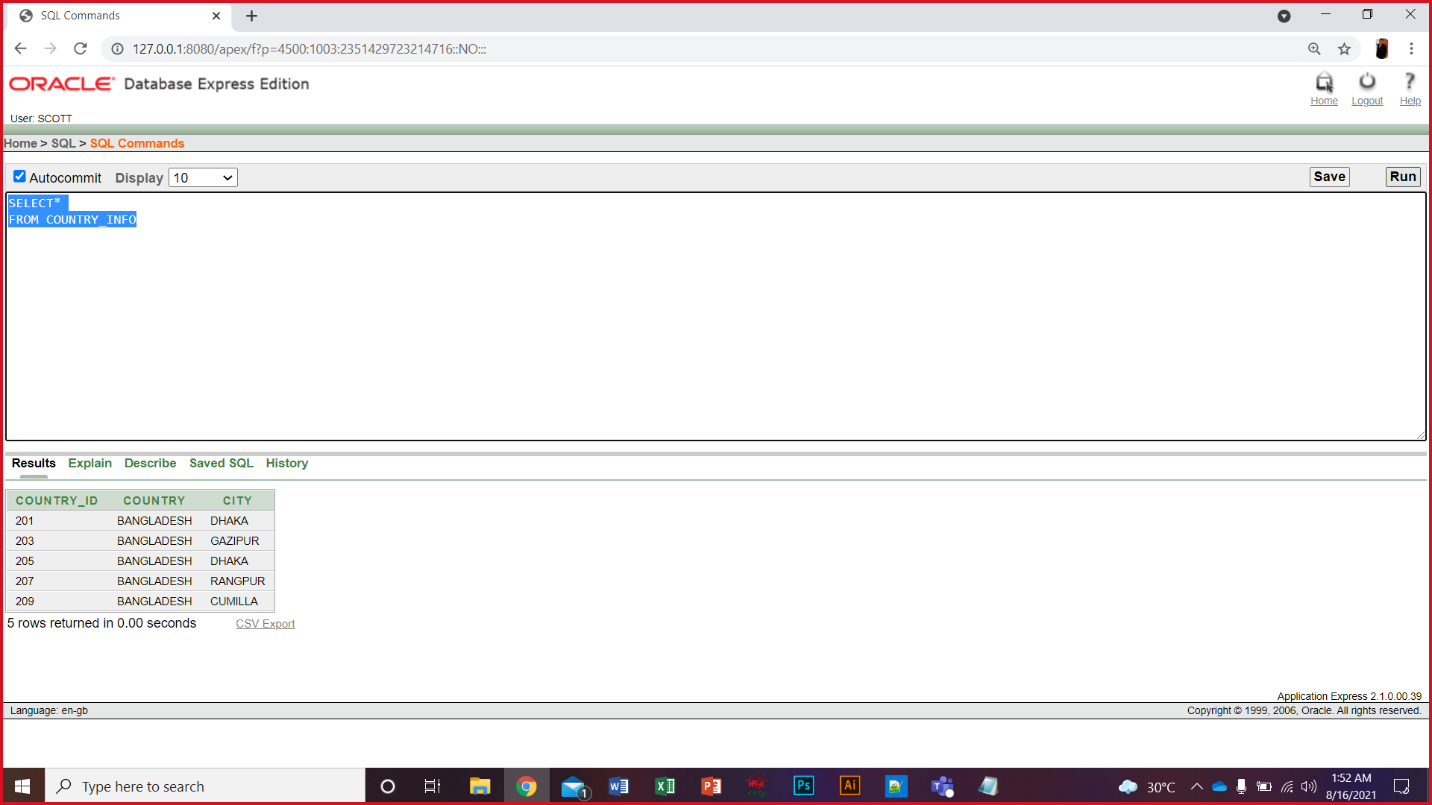


**Insertion:**

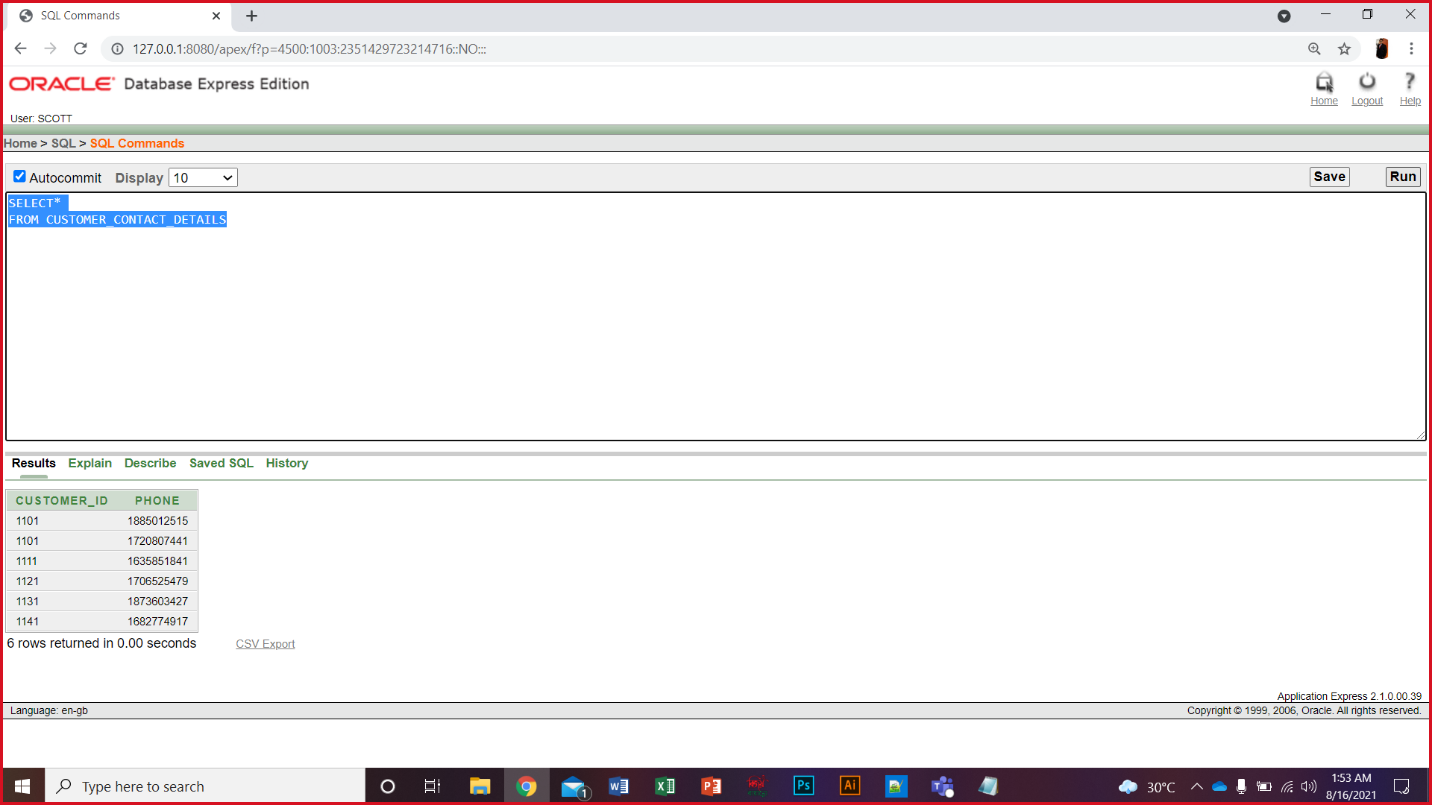
**Customer Table:**



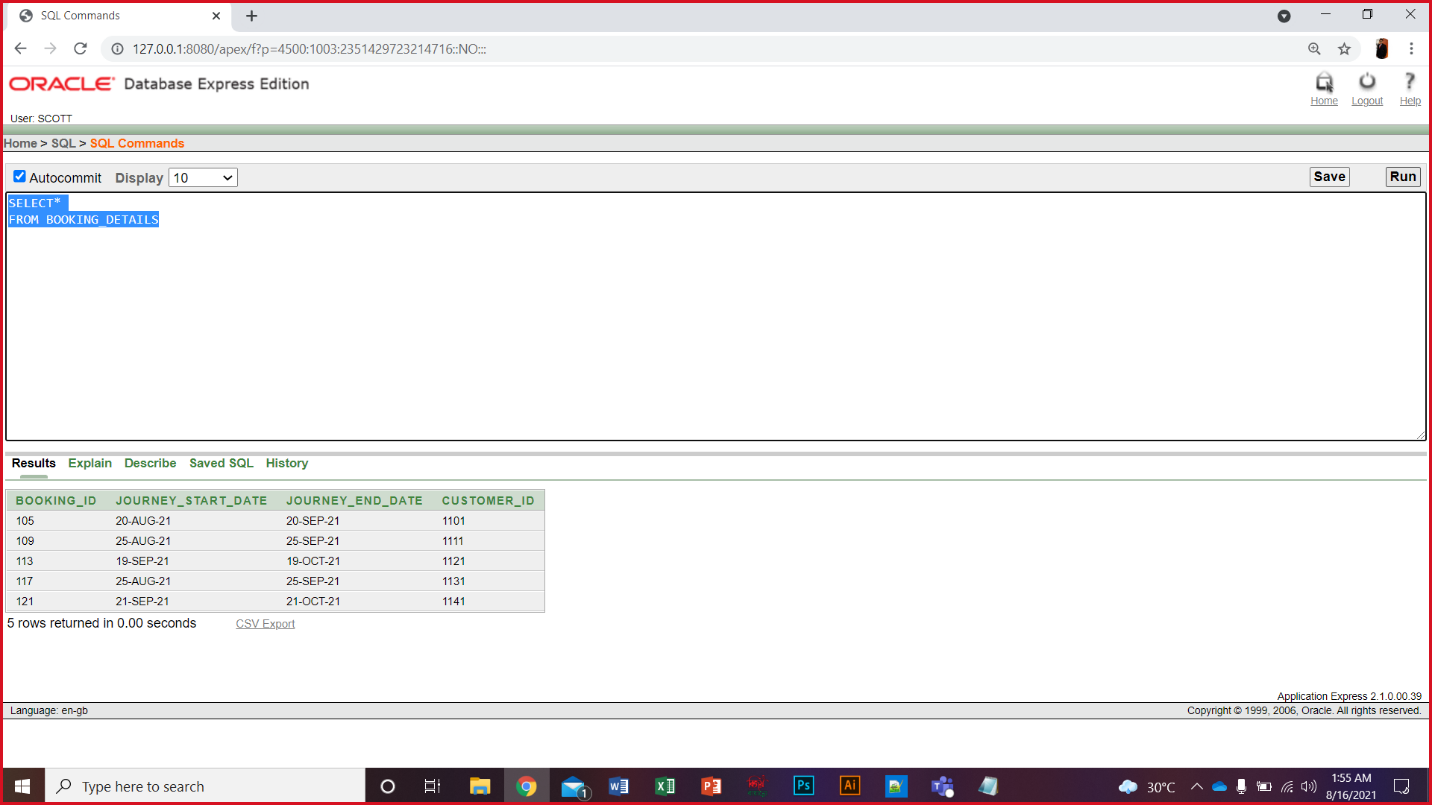
**Country info Table:**



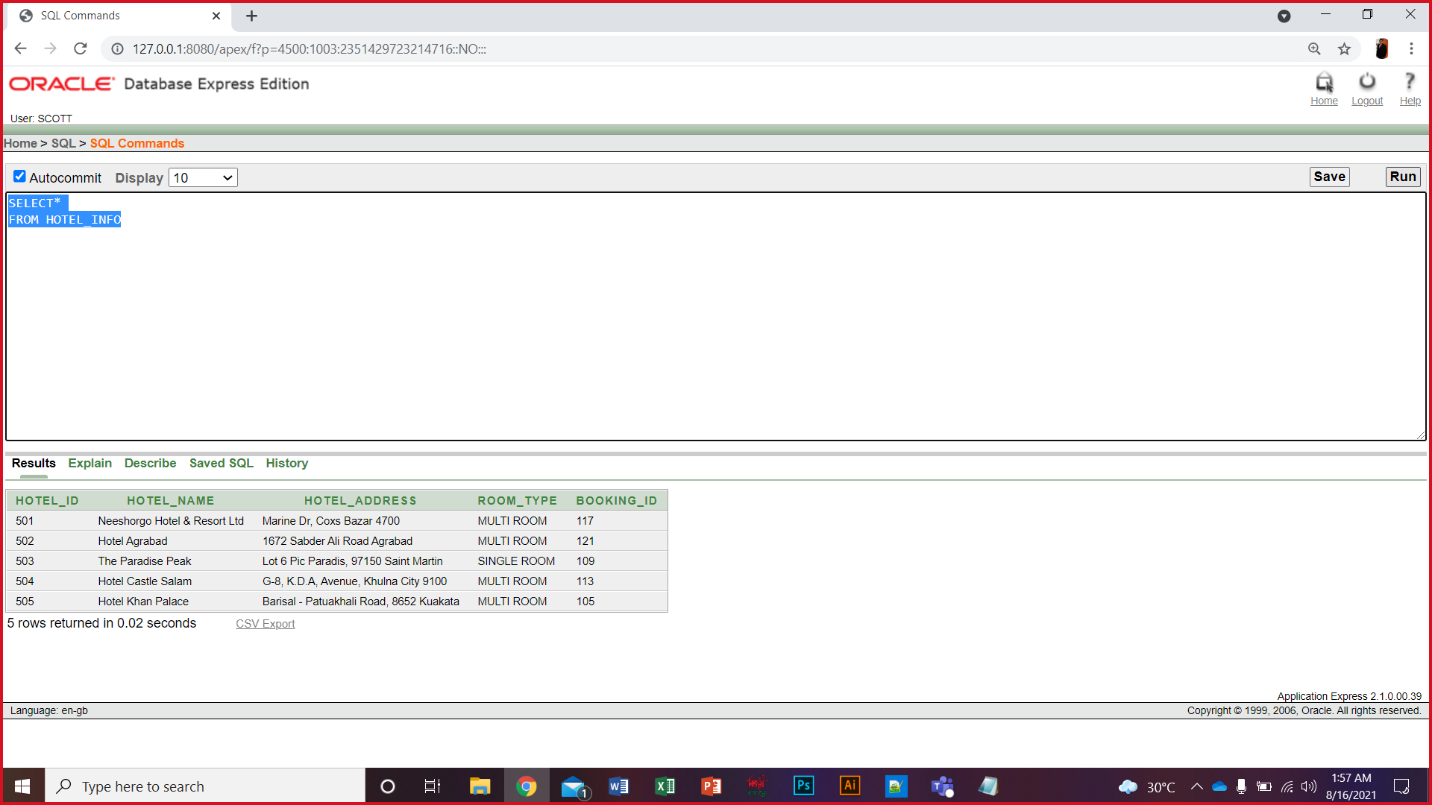
**Customer contract Table:**



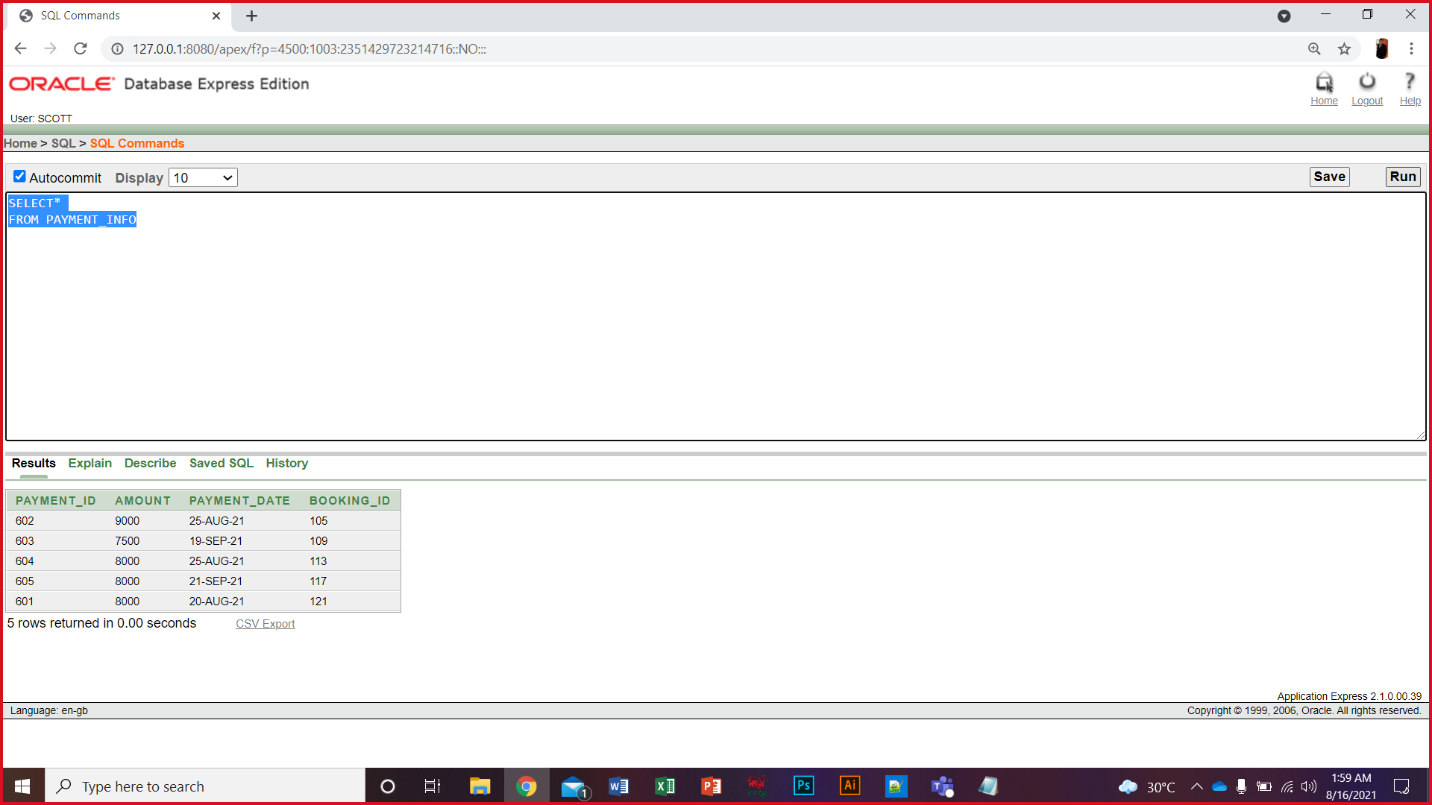
**Booking Table:**



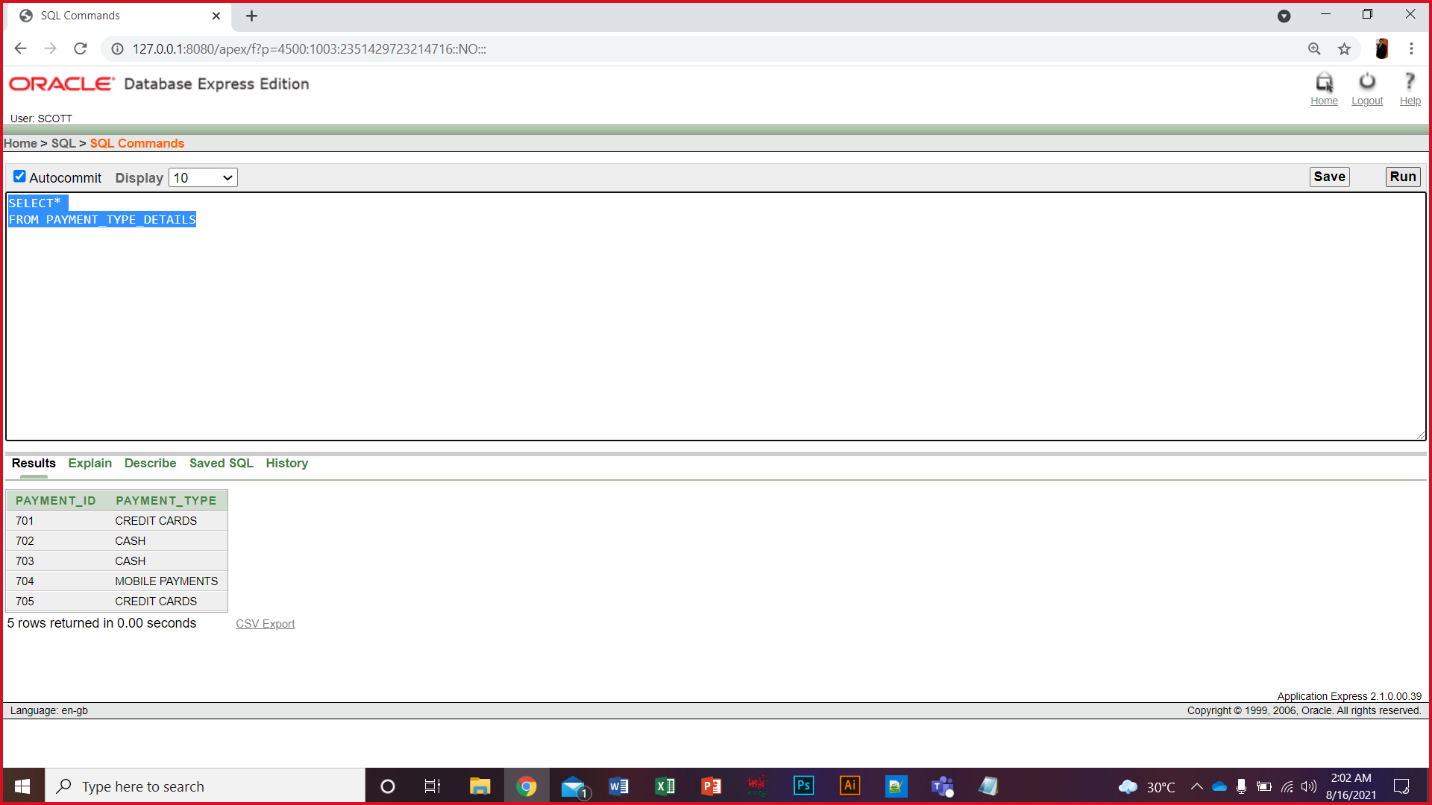
**Hotel info Table:**



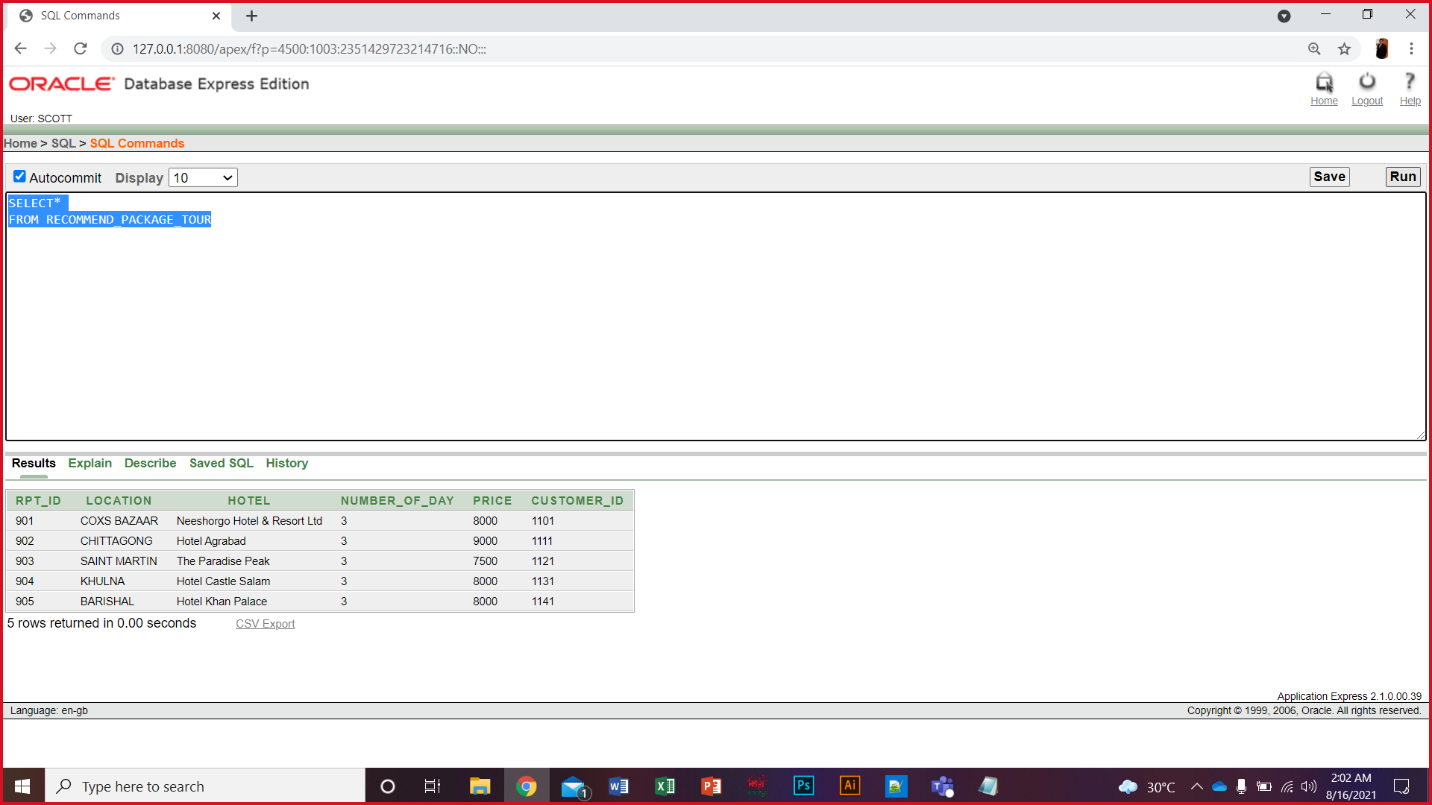
**Payment info Table:**



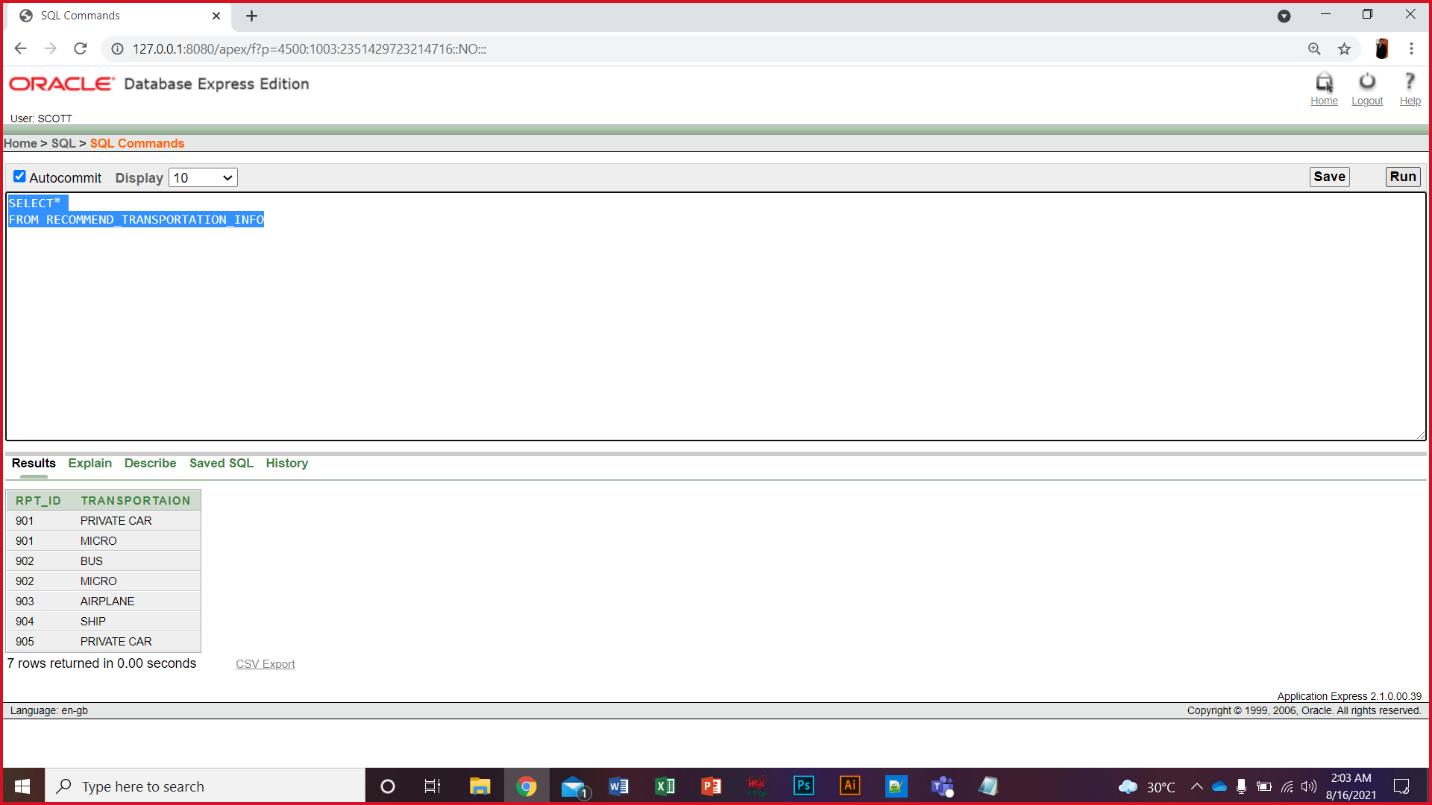
**Payment type Table:**



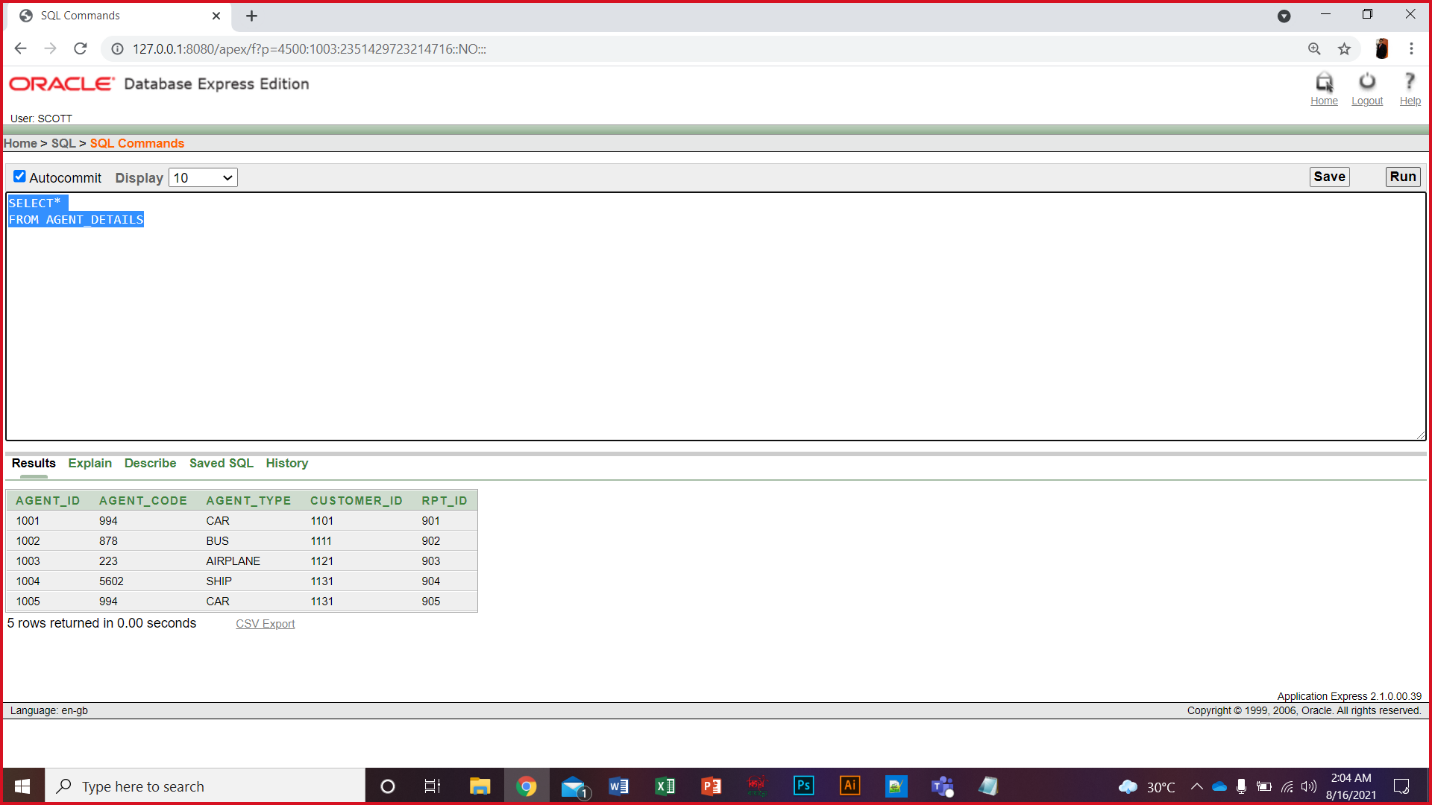
**Package tour Table:**



**Transportation Table:**



**Agent Table:**



**Agent email Table:**

