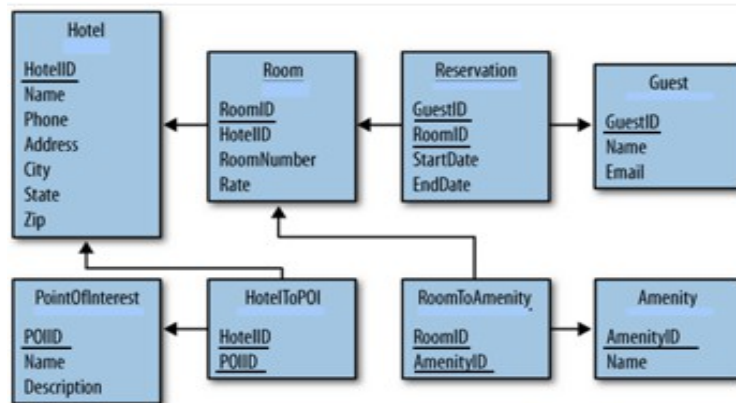


Consider the following relational database schema for an online hotel booking system.



Note: I have only shown a few solution, you should go through all lab sheets and understand all sql concepts clearly.

Write appropriate SQL statements for the following. You should write a single query for each question:

1. Retrieve the name and address of all hotels which is close to the “Eifel Tower” point of interest

Answer: Select H.Name, H.Address from ((Hotel H inner join HotelToPOI HP on H.HotelID=HP.HotelID) inner join PointOfInterest P on HP.POID=P.POID) where P.Name="Eifel Tower"

Note: There are other solutions, you can also do it in alternative way without the join key word as shown in the join lab.

2. Retrieve the room number, total bill [rate \* (enddate-startdate)] and guest name for all quests staying in “Radisson Blu” in “Dhaka” city. **DATEDIFF(enddate, startdate)**

**Answer: Select G.name, R.RoomNumber, R.rate\*DATEDIFF(R.Enddate, R.Startdate) as TotalBill from Guest G, Room R, Hotel H, Reservation Re where R.Roomid=Re.Roomid and R.HotelID=H.HotelID and G.GuestID=Re.GuestID and H.name="Radisson Blu" and H.City="Dhaka"**

**Note: There are other solutions, you can also do it in using the inner join keyword.**

- Retrieve the name of all hotels and room numbers in Venice with the amenities king sized bed and private bathroom. The retrieved list should be sorted according to the rate.
- List all amenities available in Seagull hotel.

5. List the room numbers with highest rate for each hotel in "Madrid"

**Answer: Select R.RoomNumbers from Room R Inner Join Hotel H on R.HotelID=H.HotelID where H.City="Madrid" and R.Rate=(Select max(R1.Rate) from Room R1)**

**Note: There are other solutions**

6. Retrieve the room number with lowest rate.
7. Retrieve the name of all hotels in Chittagong that are close to more than 3 point of interests.

Note for Exam:

1. In exam the question may not show schema like this, instead schema will be shown as below:

Hotel(HotelID, name, phone, address, city, state, zip)

Room(RoomID, HotelID, room\_number, rate) [Foreign key: HotelID]

and so on.....

2. If there are join questions, then you will have maximum 3 tables to join, not more than that, however, in this practice sheet there are some queries that require joining 4/5 tables, you won't have to join so many in exam.