

Instructions

- You are supposed to write SQL queries for each question and save your queries into a text document with the relevant question number.
- Then upload it to the UGVLE.
- Make sure you have saved the text file using your index number.

Exercise

You are hired to set up a relational database for an **Online Hotel Booking Company** in Sri Lanka.

Consider this relational database contains details regarding hotels, guests, and their bookings.

The database should include the following tables where the primary keys are underlined.

Hotel (hId, Name, Address, City, ContactNumber)

Guest (gId, firstName, lastName, Age, Gender, Address, City, ContactNumber)

Room (hid, RoomNo, RoomType, Price)

Booking (gId, hId, RoomNo, FromDate, ToDate, PaymentMethod)

Where, *hId* and *gId* are the identifiers for the hotels and the guests. Online hotel booking company categorizes the types of hotel rooms as *Single*, *Double*, *Triple*, *Quad*, *King*, *Queen*, and *Twin*. Booking relation contains the bookings done by guests for a hotel room starting from *fromDate* to *ToDate* of a given year with the *PaymentMethod* as online or cash payments.

Answer all questions

01. Write a SQL statement to create a database called hotelBooking to hold these data.
02. Write SQL statements to create above all tables.

Note: You should select the most suitable data types for the attributes.

03. Write SQL statements to insert data to each table created in question 2.
04. Write SQL statements to select all the data inserted to each table in question 3.

05. Write a SQL statement to display all the details of hotels located in Colombo city.
06. Write a SQL statement to display all the details of bookings done by female guests.
07. Write a SQL statement to display the full name, address and contact number of the guests who are eligible for the special Online Hotel Booking offer for senior citizens. (65 years and over)
08. Write a SQL statement to display the name and address of the hotels located in Colombo, Pandura, and Kalutara cities.
09. Write a SQL statement to display all the details of bookings for January 2020.
10. Write a SQL statement to display the first 5 records from the Guest table, where the city is Dambulla.
11. Write a SQL statement to display all the details of the most senior citizen guest who lives in the Wadduwa city.
12. Write a SQL statement to display the average room price of the Double type rooms.
13. Assume all the Single rooms in the Online hotel booking company are booked on 30th August 2020. Write a SQL statement to display the total income taken from Single rooms on 30th August 2020.
14. Write a SQL statement to display the number of hotels located in Galle city.
15. Write a SQL statement to display all the guests with a first name starting with the letter 'A'.
16. Write a SQL statement to display the details of the hotels located in a city that has "o" in the second position.
17. Write a SQL statement to display the details of the hotels that do not end the name of the hotel with "a".
18. Write a SQL statement to display all the details of the guest who are doing cash payments.
19. Write a SQL statement to display the full name, address, and contact number of the guests who are having bookings from 1 st September 2020 to 30th November 2020.
20. Write a SQL statement to display the hotel name, address, and the number of bookings for each hotel during May 2020.
21. Write a SQL statement to display the hotel name, room type, and the number of rooms for each room type in each hotel.
22. Write a SQL statement to display all the details of the guest who is eligible for the Most Senior Citizen Guest offer done by Cinnamon Red hotel, Colombo.
23. Write a SQL statement to display the full name, address, and contact number of the guests who booked King rooms in Mount Lavinia Hotel, Colombo.
24. Write a SQL statement to display the full name, address, city, and the contact number of the guests who booked any type of room in the hotels that end the located city of the hotel with the letter "e"