

**Langara College**

**Due Date: 23<sup>rd</sup> Oct 2022, 11.59 PM**

**Marks – 60**

**Note for submission: Please submit a pdf containing the solution. No other type of submission is allowed. Paste your queries in text format with solution in legible screenshot must be pasted. Only one submission per student is allowed.**

Answer the questions with respect to the table and the schema below.

*The following tables form part of a database held in a relational DBMS:*

Hotel (Hotel\_No, Name, City)

Room (Room\_No, Hotel\_No, Type, Price)

Booking (Hotel\_No, Guest\_No, Date\_From, Date\_To, Room\_No)

Guest (Guest\_No, Name, City)

*where Hotel contains hotel details and Hotel\_No is the primary key;*

Room contains room details for each hotel and (Room\_No, Hotel\_No) forms the primary key;

Booking contains details of bookings and (Hotel\_No, Guest\_No, Date\_From) forms the primary key;

Guest contains guest details and Guest\_No is the primary key.

## Hotel

<i>Hotel No</i>	<i>Name</i>	<i>City</i>
H111	Empire Hotel	New York
H235	Park Place	New York
H432	Brownstone Hotel	Toronto
H498	James Plaza	Toronto
H193	Devon Hotel	Boston
H437	Clairmont Hotel	Boston

## Room

<i>Room No</i>	<i>Hotel No</i>	<i>Type</i>	<i>Price</i>
313	H111	S	145.00
412	H111	N	145.00
1267	H235	N	175.00
1289	H235	N	195.00
876	H432	S	124.00
898	H432	S	124.00
345	H498	N	160.00
467	H498	N	180.00
1001	H193	S	150.00
1201	H193	N	175.00
257	H437	N	140.00
223	H437	N	155.00

## Booking

<i>Hotel No</i>	<i>Guest No</i>	<i>Date From</i>	<i>Date To</i>	<i>Room No</i>
H111	G256	10-AUG-99	15-AUG-99	412
H111	G367	18-AUG-99	21-AUG-99	412
H235	G879	05-SEP-99	12-SEP-99	1267
H498	G230	15-SEP-99	18-SEP-99	467
H498	G256	30-NOV-99	02-DEC-99	345
H498	G467	03-NOV-99	05-NOV-99	345
H193	G190	15-NOV-99	19-NOV-99	1001
H193	G367	12-SEP-99	14-SEP-99	1001
H193	G367	01-OCT-99	06-OCT-99	1201
H437	G190	04-OCT-99	06-OCT-99	223
H437	G879	14-SEP-99	17-SEP-99	223

## Guest

<i>Guest No</i>	<i>Name</i>	<i>City</i>
G256	Adam Wayne	Pittsburgh
G367	Tara Cummings	Baltimore
G879	Vanessa Parry	Pittsburgh
G230	Tom Hancock	Philadelphia
G467	Robert Swift	Atlanta
G190	Edward Cane	Baltimore

Answer the following queries, these queries are very similar to the ones in the textbook, but I have provided data for your reference. **[4 Marks Each]**

1. List full details of all hotels.
2. List full details of all hotels in New York.
3. List the names and cities of all guests, ordered according to their cities.
4. List all details for non-smoking rooms in ascending order of price.
5. List the number of hotels there are.
6. List the cities in which guests live. Each city should be listed only once.
7. List the average price of a room.
8. List hotel names, their room numbers, and the type of that room.
9. List the hotel names, booking dates, and room numbers for all hotels in New York.
10. What is the number of bookings that started in the month of September?
11. List the names and cities of guests who began a stay in New York in August.
12. List the hotel names and room numbers of any hotel rooms that have not been booked.
13. List the hotel name and city of the hotel with the highest priced room.
14. List hotel names, room numbers, cities, and prices for hotels that have rooms with prices lower than the lowest priced room in a Boston hotel.
15. List the average price of a room grouped by city.