National University of Computer and Emerging Sciences



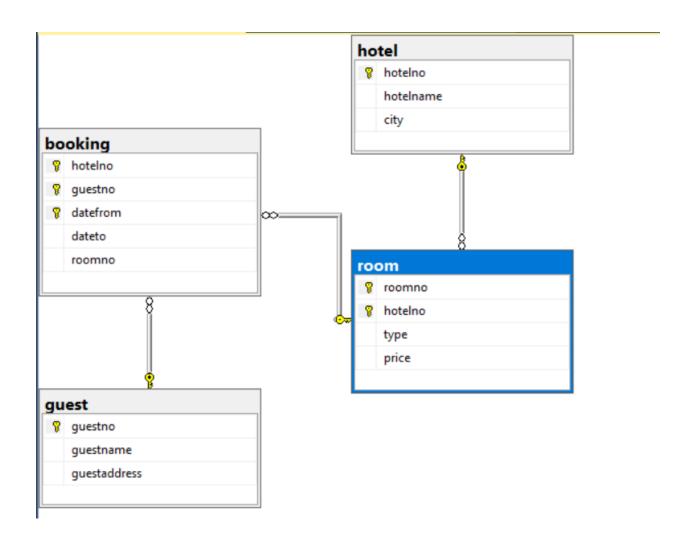
In Lab Exercise

"Data Retrieval Select-from-where Join Order by"

Database Systems Lab

Spring 2021

Department of Computer Science FAST-NU, Lahore, Pakistan



Hotel:

| | hotelno | hotelname | city |
|---|---------|---------------|--------|
| 1 | ch01 | Omni Shoreham | London |
| 2 | ch02 | Phoenix Park | London |
| 3 | dc01 | Latham | Berlin |
| 4 | fb01 | Grosvenor | London |
| 5 | fb02 | Watergate | Paris |

Room:

| | roomno | hotelno | type | price |
|----|--------|---------|--------|-------|
| 1 | 501 | fb01 | single | 19.00 |
| 2 | 601 | fb01 | double | 29.00 |
| 3 | 701 | ch02 | single | 10.00 |
| 4 | 701 | fb01 | family | 39.00 |
| 5 | 801 | ch02 | double | 15.00 |
| 6 | 901 | dc01 | single | 18.00 |
| 7 | 1001 | ch01 | single | 29.99 |
| 8 | 1001 | dc01 | double | 30.00 |
| 9 | 1001 | fb02 | single | 58.00 |
| 10 | 1101 | ch01 | family | 59.99 |
| 11 | 1101 | dc01 | family | 35.00 |
| 12 | 1101 | fb02 | double | 86.00 |

Guest:

| | guestno | guestname | guestaddress |
|---|---------|--------------|-----------------------|
| 1 | 10001 | John Kay | 56 High St, London |
| 2 | 10002 | Mike Ritchie | 18 Tain St, London |
| 3 | 10003 | Mary Tregear | 5 Tarbot Rd, Aberdeen |
| 4 | 10004 | Joe Keogh | 2 Fergus Dr, Aberdeen |
| 5 | 10005 | Carol Farrel | 6 Achray St, Glasgow |
| 6 | 10006 | Tina Murphy | 63 Well St, Glasgow |
| 7 | 10007 | Tony Shaw | 12 Park Pl, Glasgow |

Booking:

| | _ | _ | | | |
|---|---------|---------|------------|------------|--------|
| | hotelno | guestno | datefrom | dateto | roomno |
| 1 | ch01 | 10006 | 2021-04-04 | NULL | 1101 |
| 2 | ch02 | 10002 | 2025-04-04 | 2006-04-05 | 801 |
| 3 | dc01 | 10003 | 2020-04-05 | NULL | 1001 |
| 4 | dc01 | 10007 | 2013-04-05 | 2015-04-05 | 1001 |
| 5 | fb01 | 10001 • | 2001-04-04 | 2008-04-04 | 501 |
| 6 | fb01 | 10001 | 2001-04-05 | NULL | 701 |
| 7 | fb01 | 10004 | 2015-04-04 | 2015-04-05 | 601 |
| 8 | fb01 | 10005 | 2002-04-05 | 2007-04-05 | 501 |
| 9 | fb02 | 10003 | 2005-04-04 | 2004-10-04 | 1001 |

You are given a script.sql, create your database and create table and populate data in your db.

- 1. List all hotels which are in London. Order the result in descending order by hotel name.
- 2. List all hotels whose name's third alphabet has a 't'.
- 3. List all bookings whose dateto column is NULL.
- 4. List the guest name and guest address of those guests who are from Glasgow and their first name is Tony or last name is Farrel.
- 5. List all the room nos. which were booked in the period 2005-2010. Also display the room's hotel no.
- 6. List all the rooms of hotel no. 1001 which are of single type and the price is between 20 to 40.
- 7. List the room no. along with its hotel no. whose price is maximum.

Do the following question in 2 ways: Use '+' operator as well as concat function.

8. Show the data of hotel table as:

The hotel whose id is (id) is in (city) and its name is (name).

Example:

The hotel whose is id isdc01 is in Berlin and its name is Latham.

- 9. List all the hotels which have double as well as family type rooms.
- 10. List all the hotels which have single as well as double type rooms but no family type room.
- 11. List all the rooms which have been booked by either guest no. 10003 or by guest no. 1007 but not by guest no 1001.