

CS 1765 Database Systems

Fall 2007

Project 1 : SQL Statement

Due: 10/1/2007

The intent of this project assignment is to solidify your understanding of DDL and DML in SQL. You are to create a relational database schema for Hotel Reservation, and construct SQL statements to answer queries. The project has two phases.

Phase I : Create tables and insert data

- 1) Hotel Reservation has the following relational schema (table)
 - a. Hotel (hotelNo,hotelName,city) - varchar2(10), varchar2(20), varchar2(20)
 - b. Room (roomNo,hotelNo,type,price) - number(5),varchar2(10),varchar2(10),decimal(5,2)
 - c. Booking (hotelNo,guestNo,dateFrom,dateTo,roomNo) - varchar2(10), number(5), date, date, number(5)
 - d. Guest (guestNo,guestName,guestAddr) - number(5),varchar(20),varchar(50)

Create four tables using "create table.." command. Note that you need to specify primary key for each table.

- 2) Data for each table is posted on the course web site. Use "insert into" command to add data

Phase II : Answer query

- 1) List full details of all hotels in London
- 2) List the names and address of all guests living in London, alphabetically ordered by name
- 3) List all double or family rooms with a price below \$40.00 per night, in ascending order of price
- 4) List the booking for which no date has been specified

Create a SQL statement for the following questions

- 5) How many hotels are there?
- 6) What's the hotel revenue per night from all double rooms?
- 7) How many different guests have made bookings for August?

- 8) List the price and type of all rooms at Grosvenor Hotel
- 9) List all guests currently staying at the Grosvenor Hotel.
- 10) What is the total income from bookings for the Grosvenor Hotel today?
- 11) List the price and type of all rooms at the Grosvenor Hotel
- 12) List the number of rooms in each hotel.
- 13) List the number of rooms in each hotel with more than 100 rooms and located in London.
- 14) What is the most commonly booked room type for each hotel in London?
- 15) Update the price of all rooms by 5%

You need to submit a single YOURLASTAME.sql file to the online submission website by 6PM due date. Email attachment will not be accepted. The .sql file should be run by sqlplus @ or start command.