**University of Bahrain**

**College of Information Technology**

**Department of Information Systems**

ITIS213-216-Assignment 2 **(20 MARKS)**

**Name: --------------------------------------------------- ID: ----------------------------**

**Consider the following database:**

**Hotel**

|  |  |  |  |
| --- | --- | --- | --- |
| **HotelNo** | **HotelName** | **Address** | **Star** |
| 111 | Moevenpick | Muharraq | 5 |
| 222 | Gulf | Manama | 5 |
| 333 | Tulip Inn | Manama | 3 |
| 444 | Golden Tulip | Manama | 5 |

**Room**

|  |  |  |  |
| --- | --- | --- | --- |
| **RoomCode** | **HotelNo** | **Type** | **Price** |
| 11100 | 111 | D | 120 |
| 22200 | 222 | S | 80 |
| 22211 | 222 | D | 110 |
| 33300 | 333 | S | 35 |
| 33311 | 333 | D | 75 |
| 44400 | 444 | S | 47 |
| 44411 | 444 | D | 67 |

**Customer**

|  |  |  |  |
| --- | --- | --- | --- |
| **CustomerID** | **CustomerName** | **Address** | **Tel** |
| 303 | Ahmed Mohammed | Bahrain | +973 39123456 |
| 404 | Eman Salem | Kuwait | +965 987654 |
| 505 | Kahlid Abdulla | Kuwait | NULL |
| 606 | Mohammed Yousef | KSA | NULL |
| 707 | Sara Ahmed | Kuwait | +965 987654 |

**Booking**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **BookingID** | **HotelNo** | **CustomerID** | **DateFrom** | **DateTo** | **RoomCode** |
| 100 | 111 | 303 | ‘1-MAR-2011’ | ‘3-MAR-2011’ | 11100 |
| 101 | 222 | 303 | ‘4-May-2011’ | ‘4-May-2011’ | 22200 |
| 102 | 222 | 404 | ‘6-April-2011’ | ’12-April-2011’ | 22211 |
| 103 | 222 | 505 | ‘6-April-2011’ | ’12-April-2011’ | 22211 |
| 104 | 444 | 707 | ‘1-Jul-2011’ | ‘10-Jul-2011’ | 44400 |
| 105 | 444 | 606 | ‘1-Jul-2011’ | ‘5-Jul-2011’ | 44400 |
| 106 | 444 | 505 | ‘11-Aug-2011’ | ‘12-Aug-2011’ | 44411 |
| 107 | 111 | 707 | ‘1-Aug-2011’ | ‘12-Aug-2011’ | 11100 |

**Question One:**

Write SQL statement to insert the **first** record into the **Room** table. (1 mark)

INSERT INTO Room (RoomCode, HotelNo, Type, Price);

**Question Two:**

Write SQL statement to show the **structure** (columns and their definition) of the table **Hotel**. (1 mark)

**Question Three:**

**Use SELECT queries for the followings:**

1. Show the **RoomCodes** that their prices are greater or equal to 80.(1.5 mark)

**select Roomcode from Room where Price>=80;**

1. Display the HotelNo that has **less than three** bookings. (2 marks)
2. Find the total number of Bahraini customers (**Use the pattern matching symbol “%”**). (2 mark)

**Select CutomerID from Customer where Address like “%Bahrain%”;**

**Question Four:**

* **Write SQL statements to apply the following changes to the above tables:**

1. Modify the **Type** field to include 1 character and a default value (**D**). (2 mark)

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Alter table Room modify Type char (1) default ‘D’; \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Add a constraint to table **Booking** to ensure that the RoomCode is a foreign key referring to the Room table. (2 marks)

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Alter table Booking add fk1 foreign key (RoomCode) reference Room (Roomcode); \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Increase the **Room Prices** for the Type of **S**, by 5%.

**Hint: Use the formula: Price** **\*1.05.** (2 marks)

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Update Room set Price = Price\*1.05 where Type = ‘S’;

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**Question Five:**

* **Write SQL statements for the followings :( Use the Join Operation wherever you need)**

1. Retrieve all the booking details for hotel ‘Golden Tulip’ including the name of the hotel. (2 marks)

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1. Retrieve the customer name and address for all customers who have a booking with the Gulf hotel. (2.5 marks)

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**Question Six:**

Create a view from table “Booking” and name it as “Hotel Booking Information”, so that the manager in Hotel number “444” can only see the information for the hotel he is working in. (2 marks)

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Please submit to the link: <https://cutt.us/213-216-assi2>

**Good Luck**