

SQL Create Database

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Create the HOTEL practice Database

In this exercise we will practice SQL commands previously discussed

CREATE TABLE...

ALTER TABLE...

INSERT INTO...

I'm also providing more details about the HOTEL database to help you with SQL Queries II.

Consider the following relations:

Hotel (hotelNo, hotelName, city)

Room (roomNo, hotelNo, type, price)

Booking (hotelNo, guestNo, dateFrom, dateTo, roomNo)

Guest (guestNo, guestName, guestAddress)

(The underlined attributes form the primary key.)

Write SQL statements to perform the following:

1. Create the Hotel table. You don't need to create domains for this problem.
2. Create the following domains:
 - a. Room types could be for instance: Standard, Deluxe, Suite, Single, Double (choose at least 3 different types)
 - b. Hotel numbers that are present in the Hotel table.
 - c. Room prices between \$50.00 and \$500.00.
 - d. Room numbers between 1 and 9999
3. Create the Room using the above domains.
4. Create the Booking table (allowing only guests that are present in the Guest table).
5. Add a constraint to the Booking table that the dateFrom must precede the dateTo.
6. Add a constraint to the Booking table that the same room cannot be double booked. (This one is tricky!)

Useful commands:

```
CREATE DOMAIN DomainName [AS] DataType
[DEFAULT defaultOption] [CHECK (searchCondition)];
```

```
CREATE TABLE TableName
({columnName DataType [NOT NULL] [UNIQUE]
[DEFAULT defaultOption] [CHECK (searchCondition) [...]]
[PRIMARY KEY (listOfColumns),] [UNIQUE (listOfColumns) [...]]
[FOREIGN KEY (listofForeignKeyColumns)
REFERENCES ParentTableName [(listofCandidateKeyColumns)],
[ON UPDATE referentialAction] [ON DELETE referentialAction] [...]]
[CHECK (searchCondition) [...]]);
```

```
SELECT [DISTINCT | ALL] { * | [columnExpression [AS newName]] [...]}
FROM TableName [alias] [...]
[WHERE condition]
[[GROUP BY columnList] [HAVING condition]]
[ORDER BY columnList];
```

Data types:

CHAR(length)

VARCHAR(maxLength)

DECIMAL(digits,precision) - the precision is the number of digits after the decimal point

DATE

TIME