

create a new database for the problem of interest

CREATE DATABASE DBH;

use the newly made database

USE DBH;

create the four relations

CREATE TABLE hotel (hotelNumber INTEGER(1) PRIMARY KEY, hotelName VARCHAR(200) NOT NULL, city VARCHAR(200) NOT NULL) ENGINE=INNODB;

CREATE TABLE room (roomNumber INTEGER(2), hotelNumber INTEGER(1), PRIMARY KEY (roomNumber, hotelNumber), type CHAR(1) NOT NULL, price DECIMAL(6,2) NOT NULL, FOREIGN KEY (hotelNumber) REFERENCES hotel(hotelNumber) ON DELETE CASCADE) ENGINE=INNODB;

CREATE TABLE guest (guestNumber INTEGER PRIMARY KEY, guestName VARCHAR(200) NOT NULL, guestAddress VARCHAR(200)) ENGINE=INNODB;

CREATE TABLE booking (hotelNumber INTEGER(1), guestNumber INTEGER, dateFrom DATE, PRIMARY KEY (hotelNumber, guestNumber, dateFrom), dateTo DATE NOT NULL, roomNumber INTEGER(2) NOT NULL, FOREIGN KEY (hotelNumber) REFERENCES hotel(hotelNumber) ON DELETE CASCADE, FOREIGN KEY (roomNumber) REFERENCES room(roomNumber) ON DELETE RESTRICT, FOREIGN KEY (guestNumber) REFERENCES guest(guestNumber) ON DELETE CASCADE) ENGINE=INNODB;