SHOW DATABASES;

CREATE DATABASE hotel\_db;

USE hotel\_db;

CREATE TABLE hotel(

-> hotelno VARCHAR(10),

-> hotelname VARCHAR(20),

-> city VARCHAR(20),

-> PRIMARY KEY (hotelno)

-> );

SHOW TABLES;

DESCRIBE hotel;

INSERT INTO hotel VALUES ('fb01', 'Grosvenor', 'London');

INSERT INTO hotel

-> VALUES ('fb02', 'Watergate', 'Paris'),

-> ('ch01', 'Omni Shoreham', 'London'),

-> ('ch02', 'Phoenix Park', 'London');

INSERT INTO hotel VALUES ('dc01', 'Latham', 'Berlin');

SELECT \* FROM hotel;

CREATE TABLE guests (

-> guestno NUMERIC(5),

-> guestname VARCHAR(20),

-> guestaddress VARCHAR(50),

-> PRIMARY KEY (guestno));

SHOW TABLES;

DESCRIBE guests;

INSERT INTO guests VALUES

-> (10001, 'John Kay', '56 High St, London'),

-> (10002, 'Mike Ritchie', '18 Tain St, London'),

-> (10003, 'Mary Tregear', '5 Tarbot Rd, Aberdeen'),

-> (10004, 'Joe Keogh', '2 Fergus Dr, Aberdeen'),

-> (10005, 'Carol Farrel', '6 Achray St, Glasgow'),

-> (10006, 'Tina Murphy', '63 Well St, Glasgow'),

-> (10007, 'Tony Shaw', '12 Park Pl, Glasgow');

SELECT \* FROM guests;

CREATE TABLE room(

-> roomno NUMERIC(5),

-> hotelno VARCHAR(10),

-> type VARCHAR(10),

-> price DECIMAL(5,2),

-> PRIMARY KEY (roomno, hotelno),

-> FOREIGN KEY (hotelno) REFERENCES hotel(hotelno));

SHOW TABLES;

DESCRIBE room;

INSERT INTO room VALUES

-> (601, 'fb01', 'double', 29),

-> (701, 'fb01', 'family', 39),

-> (1001, 'fb02', 'single', 58),

-> (1101, 'fb02', 'double', 86),

-> (1001, 'ch01', 'single', 29.99),

-> (1101, 'ch01', 'family', 59.99),

-> (701, 'ch02', 'single', 10),

-> (801, 'ch02', 'double', 15),

-> (901, 'dc01', 'single', 18),

-> (1001, 'dc01', 'double', 30),

-> (1101, 'dc01', 'family', 35);

SELECT \* FROM room;

CREATE TABLE booking(

-> hotelno VARCHAR(10),

-> guestno NUMERIC(5),

-> datefrom DATE,

-> dateto DATE,

-> roomno NUMERIC(5),

-> PRIMARY KEY (hotelno, guestno, datefrom),

-> FOREIGN KEY (roomno, hotelno) REFERENCES room(roomno, hotelno),

-> FOREIGN KEY (guestno) REFERENCES guests(guestno));

SHOW TABLES;

DESCRIBE booking;

INSERT INTO booking VALUES

-> ('fb01', 10001, '04-04-01', '04-04-08', 601),

-> ('fb01', 10004, '04-04-15', '04-05-15', 601),

-> ('fb01', 10005, '04-05-02', '04-05-07', 601),

-> ('fb01', 10002, '04-05-16', '04-05-29', 601),

-> ('fb01', 10001, '04-05-01', null, 701),

-> ('fb02', 10003, '04-04-05', '10-04-04', 1001),

-> ('fb02', 10005, '04-05-12', '30-05-04', 1101),

-> ('ch01', 10006, '04-04-21', null, 1101),

-> ('ch02', 10002, '04-04-25', '04-05-06', 801),

-> ('dc01', 10007, '04-05-13', '04-05-15', 1001),

-> ('dc01', 10003, '04-05-20', null, 1001);

SELECT \* FROM booking;

mysql> SELECT DISTINCT \* FROM hotel h

-> INNER JOIN room r

-> ON h.hotelno = r.hotelno

-> INNER JOIN booking b

-> ON r.hotelno = b.hotelno

-> INNER JOIN guests g

-> ON b.guestno = g.guestno

-> WHERE h.hotelno = 'fb01';