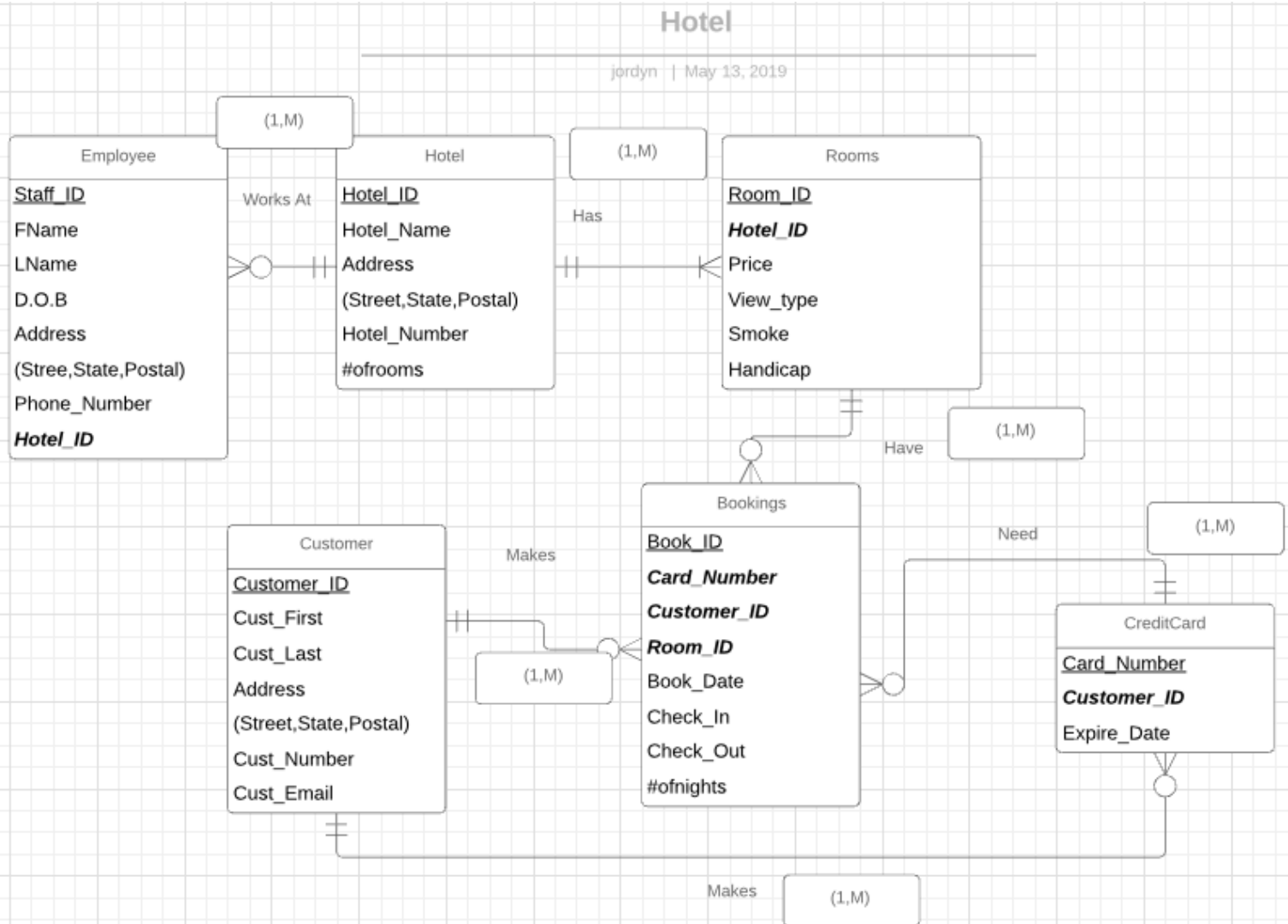


## Hotel Database

This database design project was done for a Hotel. The ER diagram starts off with an employee that works at the hotel. The hotel has rooms, where there are different types of rooms. Customers make a booking for these rooms and payments happen to officially book them. The attributes that the employee entity type has are staff\_ID (as the primary key) followed by first name, last name, date of birth, address (followed by a sub of street, state and postal code), phone number and the hotel\_ID is the foreign key from the next up entity. The next entity type is the hotel. The primary key in this entity is hotel\_ID with attributes like name, address (with sub including street, state, postal), phone number and number of rooms that hotel has. The next entity in the diagram is rooms that this hotel has. Room\_ID is the primary key and hotel\_ID is the foreign key. Attributes in this entity include the price, view\_type, smoke and handicap options. Connected to the room's entity is the booking entity. Booking entity has the primary key of book\_ID, followed by three primary keys (card\_number, customer\_ID and room\_ID). The other attributes in the booking entity are booking date, check in, check out, and the number of nights that will be stayed. Connected to the booking entity are two entities. One being the customer entity with the attributes of customer\_ID (as the primary key), first name, last name, address (with sub of street, state and postal), phone number and email address. The second connecting entity is credit card. The primary key is card\_number, the foreign key is customer\_ID and the third attribute being expiration date of the credit card.

In regard to the minimum and maximum constraints: Optionally many employees work at mandatory one hotel. Mandatory one hotel has mandatory many rooms. Mandatory one room has optionally many bookings. Mandatory one customer makes optionally many bookings.

Mandatory one credit card has optionally many bookings. Mandatory one customer makes optionally many payments.



Primary keys are underlined. **Foreign keys** are in bold.

## Logical Schema

The underlined words are primary keys. The **bold** words are foreign keys.

Employee

STAFF\_ID FNAME LNAME DOB STAFF\_STREET STAFF\_STATE  
STAFF\_POSTAL PHONE\_NUMBER **HOTEL\_ID**

Hotel

HOTEL\_ID HOTEL\_NAME HOTEL\_STREET HOTEL\_STATE  
HOTEL\_POSTAL HOTEL\_NUMBER NUMOFROOMS

Room

ROOM\_ID **HOTEL\_ID** PRICE VIEW\_TYPE SOME HANDICAP

Booking

BOOK\_ID **CARD\_NUMBER** **CUSTOMER\_ID** **ROOM\_ID** BOOK\_DATE  
CHECK\_IN CHECK\_OUT NUMOFNIGHTS

Customer

CUSTOMER\_ID CUST\_FIRST CUST\_LAST CUST\_STREET CUST\_STATE  
CUST\_POSTAL CUST\_NUMBER CUST\_EMAIL

CreditCard

CARD\_NUMBER **CUSTOMER\_ID** EXPIRE\_DATE

### SQL build

```
DROP TABLE CUSTOMER CASCADE CONSTRAINTS;
CREATE TABLE CUSTOMER
(CUSTOMER_ID INT NOT NULL,
CUST_FIRST VARCHAR(20) NOT NULL,
CUST_LAST VARCHAR(20) NOT NULL,
CUST_STREET VARCHAR(35) NOT NULL,
CUST_STATE VARCHAR(15) NOT NULL,
CUST_POSTAL VARCHAR(8) NOT NULL,
CUST_NUMBER CHAR(12) NOT NULL,
CUST_EMAIL VARCHAR(30) NOT NULL,
PRIMARY KEY (CUSTOMER_ID));
```

```
DROP TABLE HOTEL CASCADE CONSTRAINTS;
CREATE TABLE HOTEL
(HOTEL_ID INT NOT NULL,
HOTEL_NAME VARCHAR(20) NOT NULL,
HOTEL_STREET VARCHAR(35) NOT NULL,
HOTEL_STATE VARCHAR(15) NOT NULL,
HOTEL_POSTAL VARCHAR(8) NOT NULL,
HOTEL_NUMBER CHAR(12) NOT NULL,
NUM_ROOMS INT NOT NULL,
PRIMARY KEY (HOTEL_ID));
```

```
DROP TABLE EMPLOYEE CASCADE CONSTRAINTS;
CREATE TABLE EMPLOYEE
(STAFF_ID INT NOT NULL,
HOTEL_ID INT NOT NULL,
FNAME VARCHAR(20) NOT NULL,
LNAME VARCHAR(20) NOT NULL,
DOB CHAR(18) NOT NULL,
STAFF_STREET VARCHAR(35) NOT NULL,
STAFF_STATE VARCHAR(15) NOT NULL,
STAFF_POSTAL VARCHAR(8) NOT NULL,
PHONE_NUMBER CHAR(12) NOT NULL,
PRIMARY KEY (STAFF_ID),
FOREIGN KEY (HOTEL_ID) REFERENCES HOTEL (HOTEL_ID));
```

```
DROP TABLE ROOM CASCADE CONSTRAINTS;
CREATE TABLE ROOM
(ROOM_ID INT NOT NULL,
HOTEL_ID INT NOT NULL,
ROOM_TYPE VARCHAR(20) NOT NULL,
```

```
VIEW_TYPE VARCHAR(30) NOT NULL,  
PRICE INT NOT NULL,  
SMOKE CHAR(1) NOT NULL,  
HANDICAP CHAR(1) NOT NULL,  
PRIMARY KEY (ROOM_ID),  
FOREIGN KEY (HOTEL_ID) REFERENCES HOTEL (HOTEL_ID));
```

```
DROP TABLE CREDITCARD CASCADE CONSTRAINTS;  
CREATE TABLE CREDITCARD  
(CARD_NUMBER INT NOT NULL,  
CUSTOMER_ID INT NOT NULL,  
EXPIRE_DATE VARCHAR(10) NOT NULL,  
PRIMARY KEY (CARD_NUMBER),  
FOREIGN KEY (CUSTOMER_ID) REFERENCES CUSTOMER (CUSTOMER_ID));
```

```
DROP TABLE BOOKING CASCADE CONSTRAINTS;  
CREATE TABLE BOOKING  
(BOOK_ID INT NOT NULL,  
CUSTOMER_ID INT NOT NULL,  
ROOM_ID INT NOT NULL,  
CARD_NUMBER INT NOT NULL,  
BOOK_DATE VARCHAR(10) NOT NULL,  
CHECK_IN VARCHAR(10) NOT NULL,  
CHECK_OUT VARCHAR(10) NOT NULL,  
NUM_NIGHTS INT NOT NULL,  
PRIMARY KEY (BOOK_ID),  
FOREIGN KEY (CUSTOMER_ID) REFERENCES CUSTOMER (CUSTOMER_ID),  
FOREIGN KEY (ROOM_ID) REFERENCES ROOM (ROOM_ID),  
FOREIGN KEY (CARD_NUMBER) REFERENCES CREDITCARD (CARD_NUMBER));
```

## SQL Load

INSERT INTO CUSTOMER VALUES

(37604878, 'Tybalt', 'Varndell', '12907 Pearson Hill', 'Florida', '33763', '727-542-1246', 'tvarndell0@lund1.de');

INSERT INTO CUSTOMER VALUES

(77325758, 'Cristin', 'Cromwell', '796 Schlimgen Place', 'Kentucky', '40298', '502-892-5852', 'ccromwell1@cloudflare.com');

INSERT INTO CUSTOMER VALUES

(92123508, 'Stephanus', 'Wantling', '82016 Walton Avenue', 'Florida', '33124', '786-152-1006', 'swantling2@discuz.net');

INSERT INTO CUSTOMER VALUES

(60239167, 'Englebert', 'Stranger', '65920 Warner Parkway', 'Massachusetts', '02405', '508-349-3908', 'estranger3@irs.gov');

INSERT INTO CUSTOMER VALUES

(04524369, 'Maynord', 'McMurraya', '81742 Vidon Pass', 'California', '20530', '202-689-0520', 'mmcmurraya4@qq.com');

INSERT INTO CUSTOMER VALUES

(53193626, 'Pauly', 'Monan', '201 Cherokee Place', 'California', '92132', '858-457-4501', 'pmonan5@youtube.com');

INSERT INTO CUSTOMER VALUES

(16132010, 'Catharina', 'Spiegth', '466 Knutson Avenue', 'Texas', '75265', '214-399-8014', 'cspiegth6@topsy.com');

INSERT INTO CUSTOMER VALUES

(14315054, 'Othelia', 'McOmish', '64 Grim Circle', 'Connecticut', '06905', '203-635-1952', 'omcomish7@dot.gov');

INSERT INTO CUSTOMER VALUES

(35323650, 'Chloette', 'Midson', '80492 Packers Junction', 'California', '95298', '209-733-1718', 'cmidson8@ifeng.com');

INSERT INTO CUSTOMER VALUES

(21258260, 'Pandora', 'Kupis', '022 Melby Terrace', 'South Carolina', '29240', '803-101-1459', 'pkupis9@paypal.com');

INSERT INTO CUSTOMER VALUES

(55590986, 'Lothario', 'Cowhig', '43502 Sage Center', 'Tennessee', '38188', '901-376-5297', 'lcowhiga@wufoo.com');

INSERT INTO CUSTOMER VALUES

(10398735, 'Cecil', 'Pittman', '4 3rd Pass', 'Idaho', '83757', '208-629-5314', 'cpittmanb@jimdo.com');

INSERT INTO CUSTOMER VALUES

(24827593, 'Hyatt', 'Vassall', '1 Forest Place', 'Nevada', '89036', '702-208-1152', 'hvassallc@mysql.com');

INSERT INTO CUSTOMER VALUES

(93325471, 'Sergeant', 'Kalisz', '13 Pankratz Trail', 'Alabama', '36605', '251-898-2676', 'skaliszd@japanpost.jp');

INSERT INTO CUSTOMER VALUES

(62569877, 'Pren', 'Godrich', '2220 Mifflin Circle', 'Massachusetts', '01654', '508-412-8904', 'pgodriche@theguardian.com');  
INSERT INTO CUSTOMER VALUES  
(32488824, 'Chloe', 'Melding', '0222 Elgar Avenue', 'Oklahoma', '73071', '405-369-6498', 'cmeldingf@google.de');  
INSERT INTO CUSTOMER VALUES  
(57705854, 'Bobette', 'Mangion', '8724 Darwin Plaza', 'Michigan', '48550', '810-947-8058', 'bmangiong@squarespace.com');  
INSERT INTO CUSTOMER VALUES  
(51357215, 'Myca', 'Lewisham', '362 Ludington Hill', 'Tennessee', '38308', '731-668-8886', 'mlewishamh@vistaprint.com');  
INSERT INTO CUSTOMER VALUES  
(33479043, 'Patricio', 'Garlicke', '9158 Hallows Terrace', 'California', '94064', '650-843-8752', 'pgarlickei@businessinsider.com');  
INSERT INTO CUSTOMER VALUES  
(44574019, 'Budd', 'Varga', '898 Bobwhite Park', 'Connecticut', '06726', '203-258-9646', 'bvargaj@cdbaby.com');

INSERT INTO HOTEL VALUES  
(50779101, 'Pfannerstill', '77 Blue Park Avenue', 'Hawaii', '90101', '213-417-5546', 40);  
INSERT INTO HOTEL VALUES  
(74232147, 'Nicolas', '7 Bobwhite Park', 'Hawaii', '34605', '352-212-9236', 27);  
INSERT INTO HOTEL VALUES  
(55949622, 'Hansen and Schulist', '12 Mandrake Crossing', 'Hawaii', '37131', '615-593-9962', 25);  
INSERT INTO HOTEL VALUES  
(42358026, 'Thiel', '5136 Larry Lane', 'Hawaii', '22217', '571-589-7482', 21);  
INSERT INTO HOTEL VALUES  
(72185384, 'Hartmann', '07459 Victoria Avenue', 'Hawaii', '79182', '806-330-3249', 28);

INSERT INTO EMPLOYEE VALUES  
(57900845, 72185384, 'Jillian', 'Guillot', 'Sep-24-2018', '26723 Gale Hill', 'Hawaii', '20380', '202-924-6987');  
INSERT INTO EMPLOYEE VALUES  
(80204797, 50779101, 'Bella', 'Donohue', 'Sep-25-2018', '8 Fuller Pass', 'Hawaii', '20380', '212-215-6801');  
INSERT INTO EMPLOYEE VALUES  
(44259084, 50779101, 'Basile', 'Gowdy', 'Sep-26-2018', '6119 Anzinger Street', 'Hawaii', '20380', '253-560-4397');  
INSERT INTO EMPLOYEE VALUES  
(46784226, 74232147, 'Christopher', 'Dudny', 'Sep-27-2018', '5431 Stone Corner Plaza', 'Hawaii', '53263', '414-816-2767');  
INSERT INTO EMPLOYEE VALUES  
(19567544, 74232147, 'Terrence', 'Adamo', 'Sep-28-2018', '78246 Westend Lane', 'Hawaii', '37939', '865-473-1576');

INSERT INTO EMPLOYEE VALUES

(76395128, 72185384, 'Mayne', 'McComish', 'Sep-29-2018', '38439 Alpine Place', 'Utah', '84152', '801-519-5869');

INSERT INTO EMPLOYEE VALUES

(77144637, 55949622, 'Paulina', 'Le Page', 'Sep-14-2018', '639 Jenifer Center', 'Washington', '98417', '253-279-4029');

INSERT INTO EMPLOYEE VALUES

(61428348, 55949622, 'Elinor', 'Fittall', 'Sep-12-2018', '60 Everett Center', 'Texas', '77095', '713-601-9432');

INSERT INTO EMPLOYEE VALUES

(16965541, 42358026, 'Kipp', 'Dodswell', 'Sep-13-2018', '310 Carioca Trail', 'North Carolina', '28284', '704-168-4046');

INSERT INTO EMPLOYEE VALUES

(45917022, 42358026, 'Judah', 'Sallery', 'Sep-10-2018', '2 Lakewood Lane', 'Texas', '77844', '979-134-4402');

INSERT INTO ROOM VALUES

(91586673, 50779101, 'Single', 'Ocean', '100', 'Y', 'Y');

INSERT INTO ROOM VALUES

(98270788, 50779101, 'Double', 'Mountain', '150', 'Y', 'N');

INSERT INTO ROOM VALUES

(41641531, 50779101, 'Queen', 'Garden', '200', 'Y', 'N');

INSERT INTO ROOM VALUES

(78181066, 50779101, 'King', 'Ocean', '250', 'N', 'Y');

INSERT INTO ROOM VALUES

(43637536, 74232147, 'Suite', 'Mountain', '300', 'Y', 'Y');

INSERT INTO ROOM VALUES

(60719311, 74232147, 'King Suite', 'Mountain', '350', 'Y', 'Y');

INSERT INTO ROOM VALUES

(59923845, 74232147, 'Queen', 'Ocean', '200', 'N', 'Y');

INSERT INTO ROOM VALUES

(05894565, 74232147, 'Queen', 'Garden', '200', 'N', 'N');

INSERT INTO ROOM VALUES

(71924865, 55949622, 'Double', 'Mountain', '150', 'Y', 'Y');

INSERT INTO ROOM VALUES

(14567892, 55949622, 'Queen', 'Ocean', '200', 'Y', 'Y');

INSERT INTO ROOM VALUES

(91357673, 55949622, 'Single', 'Ocean', '100', 'Y', 'N');

INSERT INTO ROOM VALUES

(98278538, 55949622, 'Double', 'Mountain', '150', 'N', 'N');

INSERT INTO ROOM VALUES

(41268531, 42358026, 'Queen', 'Garden', '200', 'N', 'Y');

INSERT INTO ROOM VALUES

(91048673, 42358026, 'Single', 'Ocean', '100', 'Y', 'Y');

INSERT INTO ROOM VALUES



(98073788, 42358026, 'Double', 'Mountain', '150', 'N', 'Y');  
INSERT INTO ROOM VALUES  
(40481531, 42358026, 'Queen', 'Garden', '200', 'Y', 'N');  
INSERT INTO ROOM VALUES  
(78208066, 42358026, 'King', 'Ocean', '250', 'Y', 'Y');  
INSERT INTO ROOM VALUES  
(43684736, 42358026, 'Suite', 'Mountain', '300', 'N', 'Y');  
INSERT INTO ROOM VALUES  
(60706711, 42358026, 'King Suite', 'Mountain', '350', 'Y', 'N');  
INSERT INTO ROOM VALUES  
(59957845, 72185384, 'Queen', 'Ocean', '200', 'N', 'N');  
INSERT INTO ROOM VALUES  
(00674565, 72185384, 'Queen', 'Garden', '200', 'Y', 'Y');  
INSERT INTO ROOM VALUES  
(70674865, 72185384, 'Double', 'Mountain', '150', 'Y', 'N');  
INSERT INTO ROOM VALUES  
(85667892, 72185384, 'Queen', 'Ocean', '200', 'N', 'N');  
INSERT INTO ROOM VALUES  
(91089673, 72185384, 'Single', 'Ocean', '100', 'Y', 'Y');  
INSERT INTO ROOM VALUES  
(97678538, 72185384, 'Double', 'Mountain', '200', 'N', 'Y');  
INSERT INTO ROOM VALUES  
(49788531, 50779101, 'Queen', 'Garden', '200', 'N', 'Y');

INSERT INTO CREDITCARD VALUES  
(3555877580503138, 37604878, '11/25/2018');  
INSERT INTO CREDITCARD VALUES  
(3575513068576959, 77325758, '09/30/2018');  
INSERT INTO CREDITCARD VALUES  
(4041599148735479, 92123508, '01/19/2019');  
INSERT INTO CREDITCARD VALUES  
(3585813432224858, 60239167, '05/22/2018');  
INSERT INTO CREDITCARD VALUES  
(30236348963202, 04524369, '09/18/2018');  
INSERT INTO CREDITCARD VALUES  
(4405715380723151, 53193626, '01/23/2019');  
INSERT INTO CREDITCARD VALUES  
(30370025710733, 16132010, '08/30/2018');  
INSERT INTO CREDITCARD VALUES  
(30314860272466, 14315054, '09/09/2018');  
INSERT INTO CREDITCARD VALUES  
(201618725346064, 35323650, '06/06/2018');  
INSERT INTO CREDITCARD VALUES  
(3579629014091335, 21258260, '05/31/2018');  
INSERT INTO CREDITCARD VALUES  
(3564295351914591, 55590986, '04/23/2019');

INSERT INTO CREDITCARD VALUES  
(3535343799203015, 10398735, '10/18/2018');  
INSERT INTO CREDITCARD VALUES  
(6767811141213116, 24827593, '04/17/2019');  
INSERT INTO CREDITCARD VALUES  
(6709612276083829, 93325471, '06/08/2018');  
INSERT INTO CREDITCARD VALUES  
(3556022549061444, 62569877, '06/20/2018');  
INSERT INTO CREDITCARD VALUES  
(3572962716217149, 32488824, '10/17/2018');  
INSERT INTO CREDITCARD VALUES  
(3577843646043521, 57705854, '08/15/2018');  
INSERT INTO CREDITCARD VALUES  
(5602256408455446, 51357215, '04/15/2019');  
INSERT INTO CREDITCARD VALUES  
(2015490069153034, 33479043, '05/30/2018');  
INSERT INTO CREDITCARD VALUES  
(5018420550249833, 44574019, '05/05/2018');

INSERT INTO BOOKING VALUES  
(68503130, 37604878, 91586673, 3555877580503138, '04/06/2019', '05/19/2018', '11/23/2018',  
3);  
INSERT INTO BOOKING VALUES  
(16763378, 77325758, 98270788, 3575513068576959, '02/21/2019', '12/18/2018', '11/21/2018',  
12);  
INSERT INTO BOOKING VALUES  
(65620193, 92123508, 41641531, 4041599148735479, '06/26/2018', '06/25/2018', '01/26/2019',  
7);  
INSERT INTO BOOKING VALUES  
(08185357, 60239167, 78181066, 3585813432224858, '07/14/2018', '07/30/2018', '12/26/2018',  
12);  
INSERT INTO BOOKING VALUES  
(38320133, 04524369, 43637536, 30236348963202, '12/28/2018', '07/28/2018', '02/26/2019',  
20);  
INSERT INTO BOOKING VALUES  
(17941818, 53193626, 60719311, 4405715380723151, '09/03/2018', '09/09/2018', '01/14/2019',  
13);  
INSERT INTO BOOKING VALUES  
(63938417, 16132010, 59923845, 30370025710733, '07/26/2018', '09/23/2018', '03/14/2019', 8);  
INSERT INTO BOOKING VALUES  
(43804739, 14315054, 05894565, 30314860272466, '03/10/2019', '12/04/2018', '05/15/2018',  
15);  
INSERT INTO BOOKING VALUES  
(62733039, 35323650, 71924865, 201618725346064, '12/10/2018', '09/21/2018', '10/30/2018',  
1);

INSERT INTO BOOKING VALUES

(91234277, 21258260, 14567892, 3579629014091335, '08/18/2018', '05/21/2018', '11/17/2018', 12);

INSERT INTO BOOKING VALUES

(28684070, 55590986, 91357673, 3564295351914591, '01/22/2019', '08/21/2018', '05/27/2018', 10);

INSERT INTO BOOKING VALUES

(49891850, 10398735, 98278538, 3535343799203015, '09/11/2018', '08/17/2018', '02/19/2019', 3);

INSERT INTO BOOKING VALUES

(89386369, 24827593, 41268531, 6767811141213116, '05/12/2018', '02/14/2019', '10/13/2018', 19);

INSERT INTO BOOKING VALUES

(17954188, 93325471, 91048673, 6709612276083829, '03/17/2019', '11/24/2018', '08/28/2018', 14);

INSERT INTO BOOKING VALUES

(32437738, 62569877, 98073788, 3556022549061444, '04/06/2019', '06/18/2018', '08/04/2018', 9);

INSERT INTO BOOKING VALUES

(63499902, 32488824, 40481531, 3572962716217149, '08/11/2018', '08/02/2018', '04/26/2019', 13);

INSERT INTO BOOKING VALUES

(13413874, 57705854, 78208066, 3577843646043521, '02/06/2019', '05/01/2019', '12/22/2018', 13);

INSERT INTO BOOKING VALUES

(74934960, 51357215, 43684736, 5602256408455446, '11/26/2018', '06/09/2018', '02/01/2019', 16);

INSERT INTO BOOKING VALUES

(58514653, 33479043, 60706711, 2015490069153034, '03/29/2019', '02/12/2019', '08/22/2018', 3);

INSERT INTO BOOKING VALUES

(77912882, 44574019, 59957845, 5018420550249833, '08/20/2018', '05/13/2018', '02/04/2019', 19);

### SQL query

```
SELECT ROOM_ID, ROOM_TYPE, PRICE
FROM ROOM
WHERE PRICE > 200;
```

```
SELECT *
FROM EMPLOYEE
WHERE STAFF_POSTAL = '20380';
```

```
SELECT STAFF_ID, FNAME, LNAME, HOTEL_NAME
FROM EMPLOYEE, HOTEL
WHERE EMPLOYEE.HOTEL_ID = HOTEL.HOTEL_ID
AND FNAME LIKE '%a%';
```

```
SELECT DISTINCT VIEW_TYPE AS VIEWS
FROM ROOM;
```

```
SELECT HOTEL_NAME, COUNT(FNAME) AS NUMBEROFEMPLOYEES
FROM EMPLOYEE, HOTEL
WHERE HOTEL.HOTEL_ID = EMPLOYEE.HOTEL_ID
GROUP BY HOTEL_NAME;
```

```
SELECT CUST_FIRST, CUST_LAST, CARD_NUMBER
FROM CUSTOMER, CREDITCARD
WHERE CUSTOMER.CUSTOMER_ID = CREDITCARD.CUSTOMER_ID
AND CUST_STATE = 'California';
```

```
SELECT BOOK_ID, ROOM_TYPE, CUSTOMER_ID, (PRICE*NUM_NIGHTS) AS TOTAL
FROM ROOM, BOOKING
WHERE ROOM.ROOM_ID = BOOKING.ROOM_ID
AND NOT VIEW_TYPE = 'Ocean';
```

```
SELECT CUSTOMER_ID, CUST_FIRST, CUST_LAST
FROM CUSTOMER
WHERE CUSTOMER_ID IN
  (SELECT CUSTOMER_ID
   FROM BOOKING
   WHERE NOT BOOK_ID = 77912882);
```

```
SELECT ROOM.ROOM_ID, SUM(NUM_NIGHTS)
FROM ROOM, BOOKING
WHERE ROOM.ROOM_ID = BOOKING.ROOM_ID
AND (ROOM.ROOM_ID = 91586673 OR ROOM.ROOM_ID = 78181066)
GROUP BY ROOM.ROOM_ID;
```

```
SELECT HOTEL_NAME, AVG(PRICE) AS AVG_PRICE
FROM HOTEL, ROOM
WHERE HOTEL.HOTEL_ID = ROOM.HOTEL_ID
GROUP BY HOTEL_NAME;
```

```
SELECT DISTINCT HOTEL_NAME, STAFF_ID
FROM HOTEL
LEFT JOIN EMPLOYEE
ON HOTEL.HOTEL_ID = EMPLOYEE.HOTEL_ID
ORDER BY HOTEL_NAME;
```

```
SELECT CUST_FIRST, CUST_LAST
FROM CUSTOMER
WHERE CUST_LAST LIKE '_a%'
ORDER BY CUST_LAST DESC;
```

```
SELECT HOTEL_NAME, ROOM_ID, PRICE
FROM HOTEL
INNER JOIN ROOM
ON HOTEL.HOTEL_ID = ROOM.HOTEL_ID
WHERE PRICE < 250
ORDER BY HOTEL_NAME;
```

## Command line Logfiles

Last login: Tue May 7 13:41:55 2019 from dhcp-bus184-8.sfsu.edu

```
#####  
#                                     #  
#                                     #  
# WARNING: FOR AUTHORIZED USE ONLY. ALL ACTIVITES MAY BE MONITORED.  
#  
#                                     #  
#                                     #  
#####  
[vllanomarotta@unixlab ~]$ source /usr/bin/oracle_profile  
[vllanomarotta@unixlab ~]$ who am i  
vllanomarotta pts/1      2019-05-07 13:46 (dhcp-bus184-8.sfsu.edu)  
[vllanomarotta@unixlab ~]$ ls -l  
total 12  
drwxr-xr-x+ 3 vllanomarotta vllanomarotta 4096 May  6 18:17 OracleFiles  
drwx----- 2 vllanomarotta vllanomarotta 4096 Jan  4 2012 PRIVATE  
drwxr-xr-x+ 2 vllanomarotta vllanomarotta 4096 Jan  4 2012 public_html  
[vllanomarotta@unixlab ~]$ cd OracleFiles  
[vllanomarotta@unixlab OracleFiles]$ ls -l  
total 12  
-rw-r--r--+ 1 vllanomarotta vllanomarotta 1595 Apr  8 17:27 mailorder.sql  
drwxr-xr-x+ 2 vllanomarotta vllanomarotta 4096 May  7 13:28 Project464  
-rw-r--r--+ 1 vllanomarotta vllanomarotta 2774 Apr  8 18:14 student.sql  
[vllanomarotta@unixlab OracleFiles]$ cd Project464  
[vllanomarotta@unixlab Project464]$ ls -l  
total 20  
-rw-r--r--+ 1 vllanomarotta vllanomarotta 2169 May  6 19:09 hotel_build.sql  
-rw-r--r--+ 1 vllanomarotta vllanomarotta 11209 May  7 09:58 hotel_load.sql  
-rw-r--r--+ 1 vllanomarotta vllanomarotta 1637 May  7 13:32 hotel_query.sql  
[vllanomarotta@unixlab Project464]$ sqlplus /
```

SQL\*Plus: Release 11.2.0.3.0 Production on Tue May 7 13:49:40 2019

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Connected to:

Oracle Database 11g Enterprise Edition Release 11.2.0.3.0 - 64bit Production  
With the Partitioning, OLAP, Data Mining and Real Application Testing options

SQL> start hotel\_build.sql

Table dropped.

Table created.

Table dropped.

Table created.

Table dropped.

Table created.

Table dropped.

Table created.

Table dropped.

Table created.

Table dropped.

Table created.

SQL> start hotel\_load.sql

1 row created.

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SQL> start hotel\_query.sql

ROOM_ID	ROOM_TYPE	PRICE
78181066	King	250
43637536	Suite	300
60719311	King Suite	350
78208066	King	250
43684736	Suite	300
60706711	King Suite	350

6 rows selected.

STAFF_ID	HOTEL_ID	FNAME	LNAME	DOB	STAFF_STREET	STAFF_STATE	STAFF_PO
57900845	72185384	Jillian	Guillot	Sep-24-2018	26723 Gale Hill	Hawaii	20380
80204797	50779101	Bella	Donohue	Sep-25-2018	8 Fuller Pass	Hawaii	20380

STAFF_ID	HOTEL_ID	FNAME	LNAME	DOB	STAFF_STREET	STAFF_STATE	STAFF_PO
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PHONE\_NUMBER  
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44259084 50779101 Basile Gowdy  
Sep-26-2018 6119 Anzinger Street Hawaii 20380  
253-560-4397

STAFF_ID	FNAME	LNAME	HOTEL_NAME
57900845	Jillian	Guillot	Hartmann
80204797	Bella	Donohue	Pfannerstill
44259084	Basile	Gowdy	Pfannerstill
76395128	Mayne	McComish	Hartmann
77144637	Paulina	Le Page	Hansen and Schulist
45917022	Judah	Sallery	Thiel

6 rows selected.

VIEWS  
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Garden  
Ocean  
Mountain

HOTEL_NAME	NUMBEROFEMPLOYEES
Nicolas	2
Thiel	2
Hansen and Schulist	2
Hartmann	2
Pfannerstill	2

CUST_FIRST	CUST_LAST	CARD_NUMBER
Maynord	McMurraya	3.0236E+13
Pauly	Monan	4.4057E+15
Chloette	Midson	2.0162E+14
Patricio	Garlicke	2.0155E+15

BOOK_ID	ROOM_TYPE	CUSTOMER_ID	TOTAL
16763378	Double	77325758	1800
65620193	Queen	92123508	1400
38320133	Suite	4524369	6000
17941818	King Suite	53193626	4550
43804739	Queen	14315054	3000
62733039	Double	35323650	150
49891850	Double	10398735	450
89386369	Queen	24827593	3800
32437738	Double	62569877	1350
63499902	Queen	32488824	2600
74934960	Suite	51357215	4800

BOOK_ID	ROOM_TYPE	CUSTOMER_ID	TOTAL
58514653	King Suite	33479043	1050

12 rows selected.

CUSTOMER_ID	CUST_FIRST	CUST_LAST
37604878	Tybalt	Varndell
77325758	Cristin	Cromwell
92123508	Stephanus	Wantling
60239167	Englebert	Stranger
4524369	Maynord	McMurraya
53193626	Pauly	Monan
16132010	Catharina	Spieght
14315054	Othelia	McOmish
35323650	Chloette	Midson
21258260	Pandora	Kupis
55590986	Lothario	Cowhig

CUSTOMER_ID	CUST_FIRST	CUST_LAST
10398735	Cecil	Pittman
24827593	Hyatt	Vassall
93325471	Sergeant	Kalisz
62569877	Pren	Godrich
32488824	Chloe	Melding
57705854	Bobette	Mangion
51357215	Myca	Lewisham
33479043	Patricio	Garlicke



19 rows selected.

ROOM_ID	SUM(NUM_NIGHTS)
78181066	12
91586673	3

HOTEL_NAME	AVG_PRICE
Nicolas	262.5
Thiel	221.428571
Hansen and Schulist	150
Pfannerstill	180
Hartmann	175

HOTEL_NAME	STAFF_ID
Hansen and Schulist	61428348
Hansen and Schulist	77144637
Hartmann	57900845
Hartmann	76395128
Nicolas	19567544
Nicolas	46784226
Pfannerstill	44259084
Pfannerstill	80204797
Thiel	16965541
Thiel	45917022

10 rows selected.

CUST_FIRST	CUST_LAST
Stephanus	Wantling
Hyatt	Vassall
Tybalt	Varndell
Budd	Varga
Bobette	Mangion
Sergeant	Kalisz
Patricio	Garlicke

7 rows selected.

HOTEL_NAME	ROOM_ID	PRICE
Hansen and Schulist	71924865	150
Hansen and Schulist	98278538	150
Hansen and Schulist	91357673	100
Hansen and Schulist	14567892	200
Hartmann	85667892	200
Hartmann	91089673	100
Hartmann	97678538	200
Hartmann	70674865	150
Hartmann	59957845	200
Hartmann	674565	200
Nicolas	5894565	200

HOTEL_NAME	ROOM_ID	PRICE
Nicolas	59923845	200
Pfannerstill	41641531	200
Pfannerstill	49788531	200
Pfannerstill	91586673	100
Pfannerstill	98270788	150
Thiel	98073788	150
Thiel	91048673	100
Thiel	41268531	200
Thiel	40481531	200

20 rows selected.

SQL>