Department of Computer Science and Engineering



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DBMS PROJECT-I

NAME: HOTEL ROOM BOOKING MANAGEMENT SYSTEM

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Problem Statement:

This project aims at creating on Hotel Room Booking Management System which can be used by Customers. The customers can check the availability of room(s) in required hotel. They should be able to reserve the available rooms according to their need in advance to make their stay comfortable. The main objective of this project is to design a simple hotel room booking management system for running a hotel business.

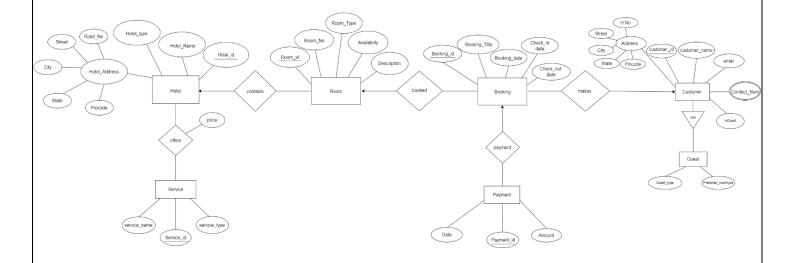
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I. ER MODEL ASSUMPTIONS:

- Each Hotel can have any number of Services available and each Service can be available in many hotels, so it will be Many to Many relationship between Hotel and Service and has m:n cardinality.
- Additionally, we assumed that Service price may vary with respect to hotels. So, additional attribute 'price' is added to 'Offers' relation which can capture these variations, providing a more accurate picture of services provided at each Hotel.
- Each Hotel will have many rooms, so it will be one to many relationship between Hotel and Room (1:n cardinality).
- A Room can be booked many times over a period of time. So, it will be one to many relationship between Room and Booking (1:n cardinality).
- A Customer can make many bookings at a time or over a period of time. So, it will be a one to many relationship between Customer and Booking.(1:n cardinality)
- Guest is a specialisation(ISA) of Customer with additional attributes, Guest_type (VIP, Management, etc) and Preferred roomtype(Single room, Double Room, etc).
- For one booking there can be one or more payments(deposit, final payment, etc), so it will be one to many relationship between Booking and Payment (1:n cardinality).
- In the ER diagram, arrow with a straight line represents one side (cardinality) of a relation and just a straight line represents many side (cardinality) of a relation.

II. ER DIAGRAM:



III. NORMALISATION:

- 1) Hotel
- i) Hotel_id ->{Hotel_name,Hotel_type,Road_No,Street,City,State,Pincode}
- ii) Pincode->{City,State}

On taking closure of Hotel_id, we get all the fields :- (Hotel_id)+ ->R

PRIMARY KEY – Hotel id

NORMALISATION:

Prime Attributes: Hotel_id

Non-Prime Attributes: Hotel_Name,Hotel_type,Road_no,Street,City,State,

Pincode

THERE IS NO **PARTIAL DEPENDENCY** SO THE TABLE IS IN **2NF**.

TRANSITIVE DEPENDENCIES:

Pincode->{City,State}

Here, a Non-Prime Attribute is determining Non-Prime attributes.

To overcome this, we need to **decompose** the table

NEW TABLES:

- i) Hotel_id ->{Hotel_Name,Hotel_type,Road_No,Street}
- ii) Pincode->{City,State}

After decomposition, these two tables are in **BCNF**.

2) Service

Service_id ->{Service_Name,Service_type}

On taking closure of Service_id, we get all the fields :- (Service_id)+ ->R

PRIMARY KEY - Service_id

NORMALISATION:

Prime Attributes: Service_id

Non-Prime Attributes: Service_Name,Service_type

THERE IS NO PARTIAL DEPENDENCY SO THE TABLE IS IN 2NF.

THERE IS NO TRANSITIVE DEPENDENCY SO THE TABLE IS IN 3NF

ALL DEPENDENCIES ARE FROM **CANDIDATE KEY** THEREFORE THE TABLE IS IN **BCNF.**

3) Offers

(Hotel id, Service id) -> {price}

On taking closure of Service_id and Hotel_id together, we get all the fields :- (Hotel_id,Service_id)+ ->R

PRIMARY KEY – Hotel_id,Service_id

NORMALISATION:

Prime Attributes: Hotel id, Service id

Non-Prime Attributes: price

THERE IS NO PARTIAL DEPENDENCY SO THE TABLE IS IN 2NF.

THERE IS NO TRANSITIVE DEPENDENCY SO THE TABLE IS IN 3NF

ALL DEPENDENCIES ARE FROM **CANDIDATE KEY** THEREFORE THE TABLE IS IN **BCNF.**

4) Room

Room_id ->{Room_No,Room_type,Availability,Description,Hotel_id}

On taking closure of Room_id, we get all the fields :- (Room_id)+ ->R

PRIMARY KEY - Room_id

NORMALISATION:

Prime Attributes: Room id

Non-Prime Attributes: Room_No,Room_type,Availability,Description,Hotel_id

THERE IS NO PARTIAL DEPENDENCY SO THE TABLE IS IN 2NF.

THERE IS NO TRANSITIVE DEPENDENCY SO THE TABLE IS IN 3NF

ALL DEPENDENCIES ARE FROM **CANDIDATE KEY** THEREFORE THE TABLE IS IN **BCNF.**

- 5) Customer
- i) Customer_id ->

{Customer Name, H No, Email, Street, Is Guest, Contact num, City, State, Pincode}

ii) Pincode -> {City,State}

On taking closure of Customer id, we get all the fields:- (Customer id)+->R

PRIMARY KEY - Customer id

NORMALISATION:

Prime Attributes: Customer id

Non-Prime Attributes: Customer Name, Email, IsGuest, H no, Street, City, State,

Pincode

Attribute Contact_num is **MULTIVALUED** hence we remove it in our present table and make another table of its own so that our present Customer table is in **1NF**

THERE IS NO **PARTIAL DEPENDENCY** SO THE TABLE IS IN **2NF**.

TRANSITIVE DEPENDENCIES:

Pincode->{City,State}

Here, a Non-Prime Attribute is determining Non-Prime attributes.

To overcome this, we need to **decompose** the table

NEW TABLES:

Customer:

i) Customer id -> {Customer Name, Email, H No, Street, Is Guest}

Pincode:

ii) Pincode->{City,State}

After decomposition, these two tables are in **BCNF**.

Here, the Pincode table is the same as the one we got after decomposing the Hotel table.

6) CustomerContact

(Customer_id,Contact_num) -> {Customer_id,Contact_num}

On taking closure of Customer_id and Contact_num together, we get all the fields :- (Customer_id,Contact_num)+ ->R

PRIMARY KEY – Customer_id,Contact_num

NORMALISATION:

Prime Attributes: Customer_id,Contact_num

THERE IS NO PARTIAL DEPENDENCY SO THE TABLE IS IN 2NF.

THERE IS NO TRANSITIVE DEPENDENCY SO THE TABLE IS IN 3NF

ALL DEPENDENCIES ARE FROM **CANDIDATE KEY** THEREFORE THE TABLE IS IN **BCNF.**

7) Guest

Customer_id -> {Guest_type, Preferred_roomtype}

Here, Guest is a **SPECIALISATION** of Customer. So, it takes Customer entity's Primary key and will have attributes of its own.

On taking closure of Customer_id, we get all the fields :- (Customer_id)+ ->R

PRIMARY KEY - Customer id

NORMALISATION:

Prime Attributes: Customer_id

Non-Prime Attributes: Guest_type,Preferred_roomtype

THERE IS NO PARTIAL DEPENDENCY SO THE TABLE IS IN 2NF.

THERE IS NO TRANSITIVE DEPENDENCY SO THE TABLE IS IN 3NF

ALL DEPENDENCIES ARE FROM **CANDIDATE KEY** THEREFORE THE TABLE IS IN **BCNF**.

8) Booking

Booking_id ->

{Booking_title,Booking_date,Check_in_date,Check_out_date,Room_id, Customer_id}

On taking closure of Booking_id, we get all the fields :- (Booking_id)+ ->R

PRIMARY KEY – Booking_id

NORMALISATION:

Prime Attributes: Booking_id

Non-Prime Attributes:

Booking_title,Booking_date,Check_in_date,Check_out_date,Room_id,Customer_id

THERE IS NO PARTIAL DEPENDENCY SO THE TABLE IS IN 2NF.

THERE IS NO TRANSITIVE DEPENDENCY SO THE TABLE IS IN 3NF

ALL DEPENDENCIES ARE FROM **CANDIDATE KEY** THEREFORE THE TABLE IS IN **BCNF.**

9) Payment

Payment id -> { Date,Amount,Booking id}

On taking closure of Payment id, we get all the fields:- (Payment id)+ ->R

PRIMARY KEY – Payment_id

NORMALISATION:

Prime Attributes: Payment id

Non-Prime Attributes: Date, Amount, Booking_id

THERE IS NO PARTIAL DEPENDENCY SO THE TABLE IS IN 2NF.

THERE IS NO TRANSITIVE DEPENDENCY SO THE TABLE IS IN 3NF

ALL DEPENDENCIES ARE FROM **CANDIDATE KEY** THEREFORE THE TABLE IS IN **BCNF.**

IV. <u>TABLES</u>:

PINCODE:

ATTRIBUTE	DATATYPE	CONSTRAINTS
Pincode	INTEGER	PRIMARY KEY NOT NULL
City	VARCHAR(20)	NOT NULL
State	VARCHAR(20)	NOT NULL

HOTEL:

ATTRIBUTE	DATATYPE	CONSTRAINTS
Hotel_id	INTEGER	PRIMARY KEY NOT NULL
Hotel_Name	VARCHAR(20)	NOT NULL
Hotel_type	VARCHAR(20) NOT NULL	
Road_No	INTEGER	NOT NULL
Street	VARCHAR(20) NOT NULL	
Pincode	INTEGER	FOREIGN KEY NOT NULL

SERVICE:

ATTRIBUTE	DATATYPE	CONSTRAINTS
Service_id	VARCHAR(10)	PRIMARY KEY NOT NULL
Service_name	VARCHAR(20)	NOT NULL
Service_type	VARCHAR(32)	NOT NULL

OFFERS:

ATTRIBUTE	DATATYPE	CONSTRAINTS
Hotel_id	INTEGER	PRIMARY KEY,
		FOREIGN KEY NOT NULL
Service_id	VARCHAR(10)	PRIMARY KEY,
		FOREIGN KEY NOT NULL
Price	INTEGER	NOT NULL

ROOM:

ATTRIBUTE	DATATYPE	CONSTRAINTS
Room_id	VARCHAR(10)	PRIMARY KEY NOT NULL
Room_No	INTEGER	NOT NULL
Room_type	VARCHAR(32)	NOT NULL
Availability	VARCHAR(10)	NOT NULL
Description	VARCHAR(128)	NOT NULL
Hotel_id	INTEGER	FOREIGN KEY NOT NULL

CUSTOMER:

ATTRIBUTE	DATATYPE	CONSTRAINTS
Customer_id	INTEGER	PRIMARY KEY NOT NULL
Customer_Name	VARCHAR(20)	NOT NULL
Email	VARCHAR(20)	NOT NULL
H_no	INTEGER	NOT NULL
Street	VARCHAR(20) NOT NULL	
IsGuest	BOOL	NOT NULL
Pincode	INTEGER	FOREIGN KEY NOT NULL

CUSTOMERCONTACT:

ATTRIBUTE	DATATYPE	CONSTRAINTS
Customer_id	INTEGER	PRIMARY KEY
		FOREIGN KEY NOT NULL
Contact_num	VARCHAR(10)	PRIMARY KEY NOT NULL

GUEST:

ATTRIBUTE	DATATYPE	CONSTRAINTS
Customer_id	INTEGER	PRIMARY KEY
		FOREIGN KEY NOT NULL
Guest_type	VARCHAR(10)	NOT NULL
Preferred_roomtype	VARCHAR(20)	NOT NULL

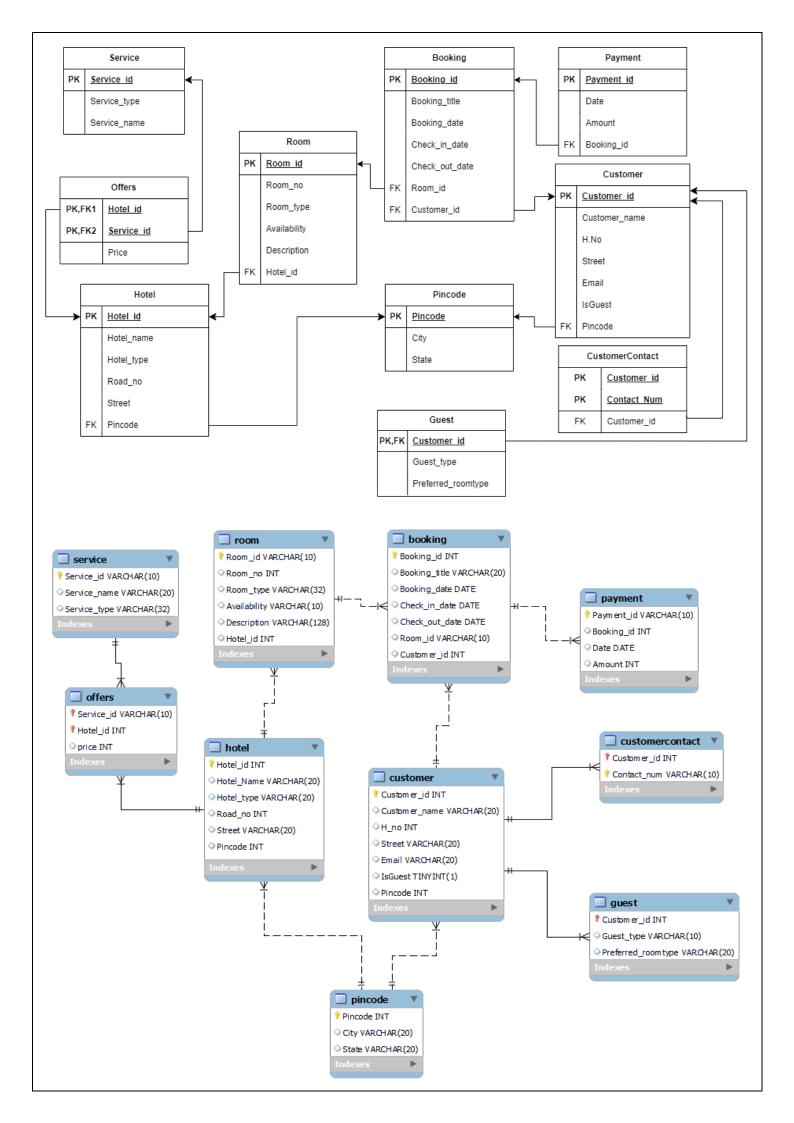
BOOKING:

ATTRIBUTE	DATATYPE	CONSTRAINTS
Booking_id	INTEGER	PRIMARY KEY NOT NULL
Booking_title	VARCHAR(20)	NOT NULL
Booking_date	DATE	NOT NULL
Check_in_date	DATE	NOT NULL
Check_out_date	DATE	NOT NULL
Room_id	VARCHAR(10)	FOREIGN KEY NOT NULL
Customer_id	INTEGER	FOREIGN KEY NOT NULL

PAYMENT:

ATTRIBUTE	DATATYPE	CONSTRAINTS		
Payment_id	VARCHAR(10) PRIMARY KEY NOT N			
Booking_id	INTEGER	FOREIGN KEY NOT NULL		
Date	DATE	NOT NULL		
Amount	INTEGER	NOT NULL		

V. <u>RELATION SCHEMA</u>:



VI. SQL CODE:

CREATION OF TABLES

```
create table Pincode
Pincode integer,
City varchar(20),
State varchar(20),
primary key(Pincode)
);
create table Hotel
Hotel_id integer,
Hotel_Name varchar(20),
Hotel_type varchar(20),
Road_no integer,
Street varchar(20),
primary key(Hotel_id),
Pincode integer,
foreign key(Pincode) references Pincode(Pincode)
);
create table Service
(
Service_id varchar(10),
Service_name varchar(20),
Service_type varchar(32),
primary key(Service_id)
```

```
);
create table Offers
Service_id varchar(10),
Hotel_id integer,
price integer,
primary key(Service_id,Hotel_id),
foreign key(Service_id) references Service(Service_id),
foreign key(Hotel_id) references Hotel(Hotel_id)
);
create table Room
(
Room_id varchar(10),
Room_no integer,
primary key(Room_id),
Room_type varchar(32),
Availability varchar(10),
Description varchar(128),
Hotel_id integer,
foreign key(Hotel_id) references Hotel(Hotel_id)
);
create table Customer
Customer_id integer,
primary key(Customer_id),
Customer_name varchar(20),
```

```
H_no integer,
Street varchar(20),
Email varchar(20),
IsGuest bool,
Pincode integer,
foreign key(Pincode) references Pincode(Pincode)
);
create table CustomerContact
(
Customer_id integer,
Contact_num varchar(10),
primary key(Customer_id,Contact_num),
foreign key (Customer_id) references Customer(Customer_id)
);
create table Guest
Customer_id integer,
primary key(Customer_id),
Guest_type varchar(10),
Preferred_roomtype varchar(20),
foreign key(Customer_id) references Customer(Customer_id)
);
create table Booking
(
Booking_id integer,
primary key(Booking_id),
```

```
Booking_title varchar(20),
Booking date date,
Check in date date,
Check out date date,
Room_id varchar(10),
Customer_id integer,
foreign key(Room_id) references Room(Room_id),
foreign key(Customer id) references Customer(Customer id)
);
create table Payment
(
Payment_id varchar(10),
Booking id integer,
Date date,
Amount integer,
primary key(Payment_id),
foreign key(Booking_id) references Booking(Booking_id)
);
```

SAMPLE DATA INSERTION

PINCODE:

```
insert into Pincode values(515001,"Anantapur","Andhra Pradesh"); insert into Pincode values(560002,"Bangalore","Karnataka"); insert into Pincode values(641001,"Coimbatore","Tamil Nadu"); insert into Pincode values(682011,"Ernakulam","Kerala"); insert into Pincode values(600001,"Chennai","Tamil Nadu"); insert into Pincode values(500003,"Hyderabad","Telangana");
```

```
insert into Pincode values (506004, "Warangal", "Telangana");
insert into Pincode values(673601,"Calicut","Kerala");
insert into Pincode values (507001, "Khammam", "Telangana");
insert into Pincode values(500020,"Visakhapatnam","Andhra Pradesh");
HOTEL:
insert into Hotel values(101, "Masineni Grand", "Budget Hotel", 32, "Bhagya
Nagar",515001);
insert into Hotel values(149, "Swagath Royal", "Extended Stay
Hotel",67,"Madhapur",500003);
insert into Hotel values(234,"Clarks Inn","Airport Hotel",165,"Bettahalsur
cross",560002);
insert into Hotel values(137, "Taj Krishna", "Luxury Hotel", 96, "Banjara Hills", 500003);
insert into Hotel values(176,"Rest Inn","Budget Hotel",54,"Balaji Nagar",507001);
insert into Hotel values(153, "Ohris", "Luxury Hotel", 145, "Begumpet", 500003);
insert into Hotel values(148, "Trident", "Business Hotel", 132, "HITEC City", 500003);
insert into Hotel values(301, "Continental", "Resort Hotel", 122, "MG Road", 682011);
insert into Hotel values(356, "Spring Way", "Resort
Hotel",142,"Kunnamangalam",673601);
insert into Hotel values(412,"Radisson Blu","Boutique Hotel",152,"Avinash
Nagar",641001);
insert into Hotel values(439,"Parkway Inn","Budget Hotel",162,"Padur",600001);
insert into Hotel values(125, "The Beacon", "Beachfront Hotel", 32, "RK beach", 500020);
insert into Hotel values(182,"ITC Kohenur","Luxury Hotel",63,"Madhapur",500003);
SERVICE:
insert into Service values("S101","Laundry","General Services");
insert into Service values("S102", "Room Service", "General Services");
insert into Service values("S103","Luggage Storage","General Services");
insert into Service values("S104", "Spa treatments", "Wellness Services");
insert into Service values ("S105", "Swimming Pool Access", "Wellness Services");
```

```
insert into Service values("S106","Meeting Rooms","Business Services");
insert into Service values("S107", "High-Speed Internet", "General Services");
insert into Service values("S108", "Kids'club activites", "Family Services");
insert into Service values("S109", "Airport Shuttle", "Transportation Services");
insert into Service values("S110","Valet Parking","Transportation Services");
insert into Service values("S111","Co-Working Space","Business Services");
OFFERS:
insert into offers values('S101',101,259);
insert into offers values('S101',176,300);
insert into offers values('S101',439,400);
insert into offers values('S102',149,200);
insert into offers values('S103',149,250);
insert into offers values('S103',148,400);
insert into offers values('S104',412,459);
insert into offers values('S104',125,359);
insert into offers values('S105',153,200);
insert into offers values('S105',137,300);
insert into offers values('S105',182,400);
insert into offers values('S106',148,249);
insert into offers values('S107',182,129);
insert into offers values('S107',149,149);
insert into offers values('S107',234,159);
insert into offers values('S107',137,149);
insert into offers values('S107',176,129);
insert into offers values('S108',149,200);
insert into offers values('S109',234,300);
insert into offers values('S110',153,99);
insert into offers values('S111',148,100);
```

```
insert into offers values('S107',356,130);
insert into offers values('S110',148,99);
insert into offers values('S108',125,200);
```

insert into offers values('S107',412,100);

ROOM:

insert into Room values ('A101',101,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',101);

insert into Room values('A102',102,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',101);

insert into Room values ('A103',103,'Family Room','Yes','Catered to families. Contains TV,in-room safe and balcony view',101);

insert into Room values('A104',104,'Single Room','No','Ideal for one guest. Contains TV,in-room safe',101);

insert into Room values('A105',105,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',101);

insert into Room values('B101',101,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',125);

insert into Room values('B102',102,'Double Room','No','Ideal for two guests. Contains TV,in-room safe',125);

insert into Room values('B103',103,'Family Room','Yes','Catered to families. Contains TV,in-room safe and balcony view',125);

insert into Room values('B104',104,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',125);

insert into Room values('B105',105,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',125);

insert into Room values ('C101',101,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',137);

insert into Room values ('C102',102,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',137);

insert into Room values ('C103',103,'Family Room','No','Catered to families. Contains TV,in-room safe and balcony view',137);

insert into Room values('C104',104,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',137);

insert into Room values('C105',105,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',137);

insert into Room values('D101',101,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',148);

insert into Room values('D102',102,'Double Room','No','Ideal for two guests. Contains TV,in-room safe',148);

insert into Room values('D103',103,'Family Room','Yes','Catered to families. Contains TV,in-room safe and balcony view',148);

insert into Room values('D104',104,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',148);

insert into Room values('D105',105,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',148);

insert into Room values('E101',101,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',149);

insert into Room values('E102',102,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',149);

insert into Room values ('E103',103, 'Family Room', 'Yes', 'Catered to families. Contains TV, in-room safe and balcony view',149);

insert into Room values('E104',104,'Single Room','No','Ideal for one guest. Contains TV,in-room safe',149);

insert into Room values('E105',105,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',149);

insert into Room values('F101',101,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',153);

insert into Room values('F102',102,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',153);

insert into Room values('F103',103,'Family Room','No','Catered to families. Contains TV,in-room safe and balcony view',153);

insert into Room values('F104',104,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',153);

insert into Room values('F105',105,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',153);

insert into Room values ('G101',101,'Double Room', 'Yes','Ideal for two guests. Contains TV,in-room safe',176);

insert into Room values('G102',102,'Double Room','No','Ideal for two guests. Contains TV,in-room safe',176);

insert into Room values('G103',103,'Family Room','Yes','Catered to families. Contains TV,in-room safe and balcony view',176);

insert into Room values('G104',104,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',176);

insert into Room values('G105',105,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',176);

insert into Room values ('H101',101,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',182);

insert into Room values ('H102',102, 'Double Room', 'Yes', 'Ideal for two guests. Contains TV, in-room safe',182);

insert into Room values('H103',103,'Family Room','Yes','Catered to families. Contains TV,in-room safe and balcony view',182);

insert into Room values('H104',104,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',182);

insert into Room values('H105',105,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',182);

insert into Room values('I101',101,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',234);

insert into Room values('I102',102,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',234);

insert into Room values('I103',103,'Family Room','Yes','Catered to families. Contains TV,in-room safe and balcony view',234);

insert into Room values('I104',104,'Single Room','No','Ideal for one guest. Contains TV,inroom safe',234);

insert into Room values('I105',105,'Single Room','No','Ideal for one guest. Contains TV,inroom safe',234);

insert into Room values('J101',101,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',301);

insert into Room values('J102',102,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',301);

insert into Room values('J103',103,'Family Room','Yes','Catered to families. Contains TV,in-room safe and balcony view',301);

insert into Room values('J104',104,'Single Room','No','Ideal for one guest. Contains TV,inroom safe',301);

insert into Room values('J105',105,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',301);

insert into Room values('K101',101,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',356);

insert into Room values('K102',102,'Double Room','No','Ideal for two guests. Contains TV,in-room safe',356);

insert into Room values ('K103',103, 'Family Room', 'Yes', 'Catered to families. Contains TV,in-room safe and balcony view',356);

insert into Room values('K104',104,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',356);

insert into Room values('K105',105,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',356);

insert into Room values('L101',101,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',412);

insert into Room values('L102',102,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',412);

insert into Room values ('L103',103, 'Family Room', 'Yes', 'Catered to families. Contains TV, in-room safe and balcony view',412);

insert into Room values('L104',104,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',412);

insert into Room values('L105',105,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',412);

insert into Room values('M101',101,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',439);

insert into Room values('M102',102,'Double Room','Yes','Ideal for two guests. Contains TV,in-room safe',439);

insert into Room values('M103',103,'Family Room','Yes','Catered to families. Contains TV,in-room safe and balcony view',439);

insert into Room values('M104',104,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',439);

insert into Room values('M105',105,'Single Room','Yes','Ideal for one guest. Contains TV,in-room safe',439);

```
CUSTOMER:
insert into Customer values(1,'Yashwanth',4,'Vidya
Nagar', 'yash123@gmail.com', false, 500003);
insert into Customer values(2,'Karthik',17,'Ram Nagar','pkr222@gmail.com',
false,515001);
insert into Customer values(3,'Sai Teja',53,'MG Road','st123@gmail.com',true,600001);
insert into Customer values(4, 'Mahesh', 12, 'Nehru Road', 'pdsm111@gmail.com',
false,507001);
insert into Customer values(5,'Akhil',14,'SP nagar','kas333@gmail.com', false,500020);
insert into Customer values(6,'Vishnu',24,'Bharat Nagar','vishsays@gmail.com',
false,506004);
insert into Customer values(7,'Shiva',34,'Kukatpally','shivs@gmail.com', true,500003);
insert into Customer values(8,'Arun',34,'Madhapur','amarun@gmail.com', false,500003);
insert into Customer values(9, 'Sreeram', 54, 'Kazipet', 'ksr29@gmail.com', true, 506004);
insert into Customer values(10, 'Karthikeya', 64, 'Kasergod', 'shawnfrost@gmail.com',
false,560002);
insert into Customer values(11, 'Manoj', 74, 'Calicut Circle', 'manoj8@gmail.com',
true,673601);
insert into Customer values(12,'Vamshi',84,'Padur','vamz21@gmail.com', false,600001);
insert into Customer values(13, 'Chandu', 94, 'Benz Circle', 'chandu233@gmail.com',
true,641001);
insert into Customer values(14, 'Rani', 41, 'Fathima Nagar', 'rani123@gmail.com',
false,500020);
CUSTOMERCONTACT:
insert into CustomerContact values(1,'9490422671');
insert into CustomerContact values(2,'9490422672');
insert into CustomerContact values(3,'9490422673');
insert into CustomerContact values(4,'9490422674');
insert into CustomerContact values(5, '9490422675');
```

insert into CustomerContact values(5, '9490422676');

insert into CustomerContact values(6,'9490422677');

```
insert into CustomerContact values(7,'9490422678');
insert into CustomerContact values(8,'9490422679');
insert into CustomerContact values(9,'9490422680');
insert into CustomerContact values(10,'9490422681');
insert into CustomerContact values(11,'9490422682');
insert into CustomerContact values(12,'9490422683');
insert into CustomerContact values(13,'9490422684');
insert into CustomerContact values(14,'9490422685');
GUEST:
insert into Guest values(3,'VIP','Family Room');
insert into Guest values(7,'VVIP','King Suite');
insert into Guest values(9, 'Management', 'Family Room');
insert into Guest values(11, 'Management', 'Single Room');
insert into Guest values(13,'VIP','Family Room');
BOOKING:
insert into Booking values(120, Stay in Hyd', "2024-03-07", '2024-03-11', '2024-03-
29','E101',1);
insert into Booking values(121, Business Meet', "2024-01-10", '2024-01-11', '2024-01-
12','D104',2);
insert into Booking values(122, 'Hyd Trip', "2023-10-13", '2024-01-10', '2024-01-
18','E103',3);
insert into Booking values(123, Booking No.123', "2023-12-12", '2023-12-12', '2023-12-
14','A101',4);
insert into Booking values(124, 'Birthday Celebration', "2023-11-11", '2023-11-11', '2023-
11-12','C104',5);
insert into Booking values(125, 'Prepaid C101 booking', "2023-12-10", '2024-02-12', '2024-
02-14','C101',6);
insert into Booking values(126, Flight delay', "2023-11-10", '2023-11-10', '2023-11-
10','1101',7);
```

```
insert into Booking values(127, 'Ernakulam Sea Visit', "2023-09-13", '2024-01-11', '2024-
01-18', 'J105',8);
insert into Booking values(128, 'Kochi Trip', "2024-01-10", '2024-01-11', '2024-01-
14','K103',9);
insert into Booking values(129, 'Vacation(Office)', "2024-02-10", '2024-02-11', '2024-02-
12','F102',10);
insert into Booking values(130, 'TA trip', "2024-01-13", '2024-02-11', '2024-02-
11','G105',11);
insert into Booking values(131, 'Chennai Visit', "2024-03-08", '2024-03-11', '2024-03-
14','M103',12);
insert into Booking values(132, Visit to Vizag', "2024-02-18", '2024-04-11', '2024-04-
14','B103',13);
insert into Booking values(133, 'Weekend Visit to Hyd', "2024-02-19", '2024-03-11', '2024-
03-14','H103',14);
PAYMENT:
insert into Payment values('T4305671',120,'2024-03-07',3500);
insert into Payment values('T4305672',121,'2024-01-10',1500);
insert into Payment values('T4305673',122,'2023-10-13',3000);
insert into Payment values('T4305674',123,'2023-12-12',500);
insert into Payment values('T4305675',124,'2023-11-11',300);
insert into Payment values('T4305676',125,'2023-12-10',550);
insert into Payment values('T4305677',126,'2023-11-10',800);
insert into Payment values('T4305678',127,'2023-09-13',2000);
insert into Payment values('T4305679',128,'2024-01-10',800);
insert into Payment values('T4305680',129,'2024-02-10',2500);
insert into Payment values('T4305681',130,'2024-01-13',300);
insert into Payment values('T4305682',131,'2024-03-08',1200);
insert into Payment values('T4305683',132,'2024-02-18',1700);
insert into Payment values('T4305684',133,'2024-02-19',1500);
```

FEW TABLES OUTPUT:

Customer:

Customer_id	Customer_name	H_no	Street	Email	IsGuest	Pincode
1	Yashwanth	4	Vidya Nagar	yash123@gmail.com	0	500003
2	Karthik	17	Ram Nagar	pkr222@gmail.com	0	515001
3	Sai Teja	53	MG Road	st123@gmail.com	1	600001
4	Mahesh	12	Nehru Road	pdsm111@gmail.com	0	507001
5	Akhil	14	SP nagar	kas333@gmail.com	0	500020
6	Vishnu	24	Bharat Nagar	vishsays@gmail.com	0	506004
7	Shiva	34	Kukatpally	shivs@gmail.com	1	500003
8	Arun	34	Madhapur	amarun@gmail.com	0	500003
9	Sreeram	54	Kazipet	ksr29@gmail.com	1	506004
10	Karthikeya	64	Kasergod	shawnfrost@gmail.com	0	560002
11	Manoj	74	Calicut Circle	manoj8@gmail.com	1	673601
12	Vamshi	84	Padur	vamz21@gmail.com	0	600001
13	Chandu	94	Benz Cirde	chandu233@gmail.com	1	641001
14	Rani	41	Fathima Nagar	rani123@gmail.com	0	500020
NULL	NULL	NULL	NULL	NULL	HULL	NULL

Pincode:

Pincode	City	State
500003	Hyderabad	Telangana
500020	Visakhapatnam	Andhra Pradesh
506004	Warangal	Telangana
507001	Khammam	Telangana
515001	Anantapur	Andhra Pradesh
560002	Bangalore	Karnataka
600001	Chennai	Tamil Nadu
641001	Coimbatore	Tamil Nadu
673601	Calicut	Kerala
682011	Ernakulam	Kerala
NULL	NULL	NULL

Hotel:

Hotel_id	Hotel_Name	Hotel_type	Road_no	Street	Pincode
101	Masineni Grand	Budget Hotel	32 Bhagya Nagar		515001
125	The Beacon	Beachfront Hotel	32	RK beach	500020
137	Taj Krishna	Luxury Hotel	96	96 Banjara Hills	
148	Trident	Business Hotel	132	2 HITEC City	
149	Swagath Royal	Extended Stay Hotel	67	Madhapur	500003
153	Ohris	Luxury Hotel	145	Begumpet	500003
176	Rest Inn	Budget Hotel	54	Balaji Nagar	
182	ITC Kohenur	Luxury Hotel	63	Madhapur	500003
234	Clarks Inn	Airport Hotel	165	Bettahalsur cross	560002
301	Continental	Resort Hotel	122	MG Road	
356	Spring Way	Resort Hotel	142	Kunnamangalam	673601
412	Radisson Blu	Boutique Hotel	152	Avinash Nagar	641001
439 NULL	Parkway Inn	Budget Hotel	162 NULL	Padur	600001

Guest:

Customer_id	Guest_type	Preferred_roomtype		
3	VIP	Family Room		
7	VVIP	King Suite		
9	Management	Family Room		
11	Management	Single Room		
13	VIP	Family Room		
HULL	NULL	NULL		

Booking:

Booking_id	Booking_title	Booking_date	Check_in_date	Check_out_date	Room_id	Customer_id
120	Stay in Hyd	2024-03-07	2024-03-11	2024-03-29	E101	1
121	Business Meet	2024-01-10	2024-01-11	2024-01-12	D104	2
122	Hyd Trip	2023-10-13	2024-01-10	2024-01-18	E103	3
123	Booking No. 123	2023-12-12	2023-12-12	2023-12-14	A101	4
124	Birthday Celebration	2023-11-11	2023-11-11	2023-11-12	C104	5
125	Prepaid C101 booking	2023-12-10	2024-02-12	2024-02-14	C101	6
126	Flight delay	2023-11-10	2023-11-10	2023-11-10	I101	7
127	Ernakulam Sea Visit	2023-09-13	2024-01-11	2024-01-18	J105	8
128	Kochi Trip	2024-01-10	2024-01-11	2024-01-14	K103	9
129	Vacation(Office)	2024-02-10	2024-02-11	2024-02-12	F102	10
130	TA trip	2024-01-13	2024-02-11	2024-02-11	G105	11
131	Chennai Visit	2024-03-08	2024-03-11	2024-03-14	M103	12
132	Visit to Vizag	2024-02-18	2024-04-11	2024-04-14	B103	13
133	Weekend Visit to Hyd	2024-02-19	2024-03-11	2024-03-14	H103	14
NULL	NULL	NULL	NULL	NULL	NULL	NULL