

FOTO DI

* TEAM-CODE : KMM

Under supervision :
DR.Wael Zakaria
DR.Mohamed Hashim

OUR TEAM



Kareem
Mohamed



Mohamed
Sheta



Mohamed
Zenhom



PROJECT OVERVIEW

PROBLEM :-

In the fast-paced world we live in, travelers often face challenges when booking hotels, including:

- Time-consuming manual processes.
- Limited access to real-time availability.
- Lack of a centralized system for comparing options.

These inefficiencies can result in frustration for both customers and hotel staff, ultimately impacting the overall travel experience.





OUR SERVICES



OBJECTIVE :-

The goal of this project is to design and develop an Online Hotel Reservation System that:

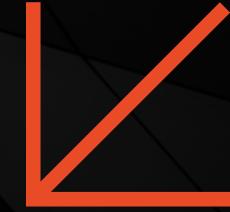
- Simplifies the hotel booking process by providing an intuitive and user-friendly platform.
- Offers real-time availability, pricing, and booking confirmation.
- Reduces manual workload for hotel management through automated systems.

This system bridges the gap between travelers and hotels, ensuring a seamless and efficient booking experience.





KEY POINTS OF THE SCHEMA



1. Main Entities:

- Hotel: Represents hotels with attributes like Name, Location, ID, Manager, etc.
- Employee: Contains employee details, linked to hotels by Hotel_ID.
- Guest: Stores guest information, crucial for reservations and reviews.
- Owner: Tracks ownership details for hotels.

2. Reservations:

- Book_Room: Manages room bookings, including dates, payment methods, and reviews.
- Book_Hall: Handles hall bookings with timing and date details.

3. Services & Facilities:

- Hotel_service: Links hotels to specific services they offer.
- Room & Hall: Define details about rooms and halls like pricing, capacity, and availability.

4. Relationships:

- Well-defined primary keys and composite keys to establish many-to-one and many-to-many relationships.

5. Dependent Table: Tracks employees' dependents, which adds a layer of HR functionality to the system.

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SCHEMA CONTENTS

Owner

Attributes:

- Fname: First name.
- minit: Middle initial.
- Lname: Last name.
- SSN: Social Security Number (Primary Key).
- phone: Contact number.
- sex: Gender.
- Bdate: Date of birth.
- Nationality: Nationality.

Employee

Attributes:

- Fname: First name.
- minit: Middle initial.
- Lname: Last name.
- SSN: Social Security Number (Primary Key).
- phone: Contact number.
- salary: Employee's salary.
- sex: Gender.
- Bdate: Date of birth.
- Nationality: Nationality of the employee.
- job_description: Job title or role in the hotel.
- Address: Residential address.
- Hotel_ID: ID of the hotel where the employee works.
- Super_ssn: Supervisor's SSN.

Guest

Attributes:

- Fname: First name.
- minit: Middle initial.
- Lname: Last name.
- SSN: Social Security Number (Primary Key).
- phone: Contact number.
- sex: Gender.
- Bdate: Date of birth.
- Nationality: Nationality.
- Email: Email address for communication.

*

SCHEMA CONTENTS

Hotel

Attributes:

- Name: Name of the hotel.
- phone: Contact number of the hotel.
- Location: Address or location of the hotel.
- ID: Unique identifier for each hotel (Primary Key).
- Total_num_of_rooms: Total rooms available in the hotel.
- Total_num_of_halls: Total halls available in the hotel.
- num_of_free_rooms: Number of rooms currently available for booking.
- num_of_free_halls: Number of halls currently available for booking.
- MGR_SSN: Manager's Social Security Number (SSN).
- MGR_start_date: Date when the manager started managing the hotel.

Hotel_service

Attributes:

- Service: Name of the service (e.g., Wi-Fi, Spa).
- Hotel_ID: ID of the hotel providing the service. (Primary Key: Service, Hotel_ID).

Hall

Attributes:

- Capacity: Maximum capacity of the hall.
- Hall_num: Unique hall number (Primary Key: Hall_num, Hotel_ID).
- Hotel_ID: ID of the hotel where the hall is located.

Room

Attributes:

- Type: Type of the room (e.g., Single, Double).
- price: Price per night.
- Room_num: Unique room number (Primary Key: Room_num, Hotel_ID).
- Floor: Floor where the room is located.
- Hotel_ID: ID of the hotel where the room is located.

*

SCHEMA CONTENTS

Dependent

Attributes:

- name: Name of the dependent.
- Address: Address of the dependent.
- sex: Gender.
- phone: Contact number.
- Bdate: Date of birth.
- Relation: Relationship to the employee.
- Employee_SSN: SSN of the employee. (Primary Key: name, Employee_SSN).

Book_Room

Attributes:

- Guest_SSN: SSN of the guest.
- Room_num: Number of the room being booked.
- Hotel_ID: Hotel ID where the room is located.
- Check_in_date: Check-in date.
- Check_out_date: Check-out date.
- Amount: Amount paid for the booking.
- Review: Optional review for the room.
- Code: Booking code for reference.
- Pay_method: Payment method used. (Primary Key: Guest_SSN, Room_num, Hotel_ID).

Own

Attributes:

- Owner_SSN: Owner's SSN.
- Hotel_ID: Hotel ID they own. (Primary Key: Owner_SSN, Hotel_ID).

Book_Hall

Attributes:

- Guest_SSN: SSN of the guest.
- Hall_num: Number of the hall being booked.
- Hotel_ID: Hotel ID where the hall is located.
- Date: Booking date.
- Time: Booking time. (Primary Key: Guest_SSN, Hall_num, Hotel_ID).

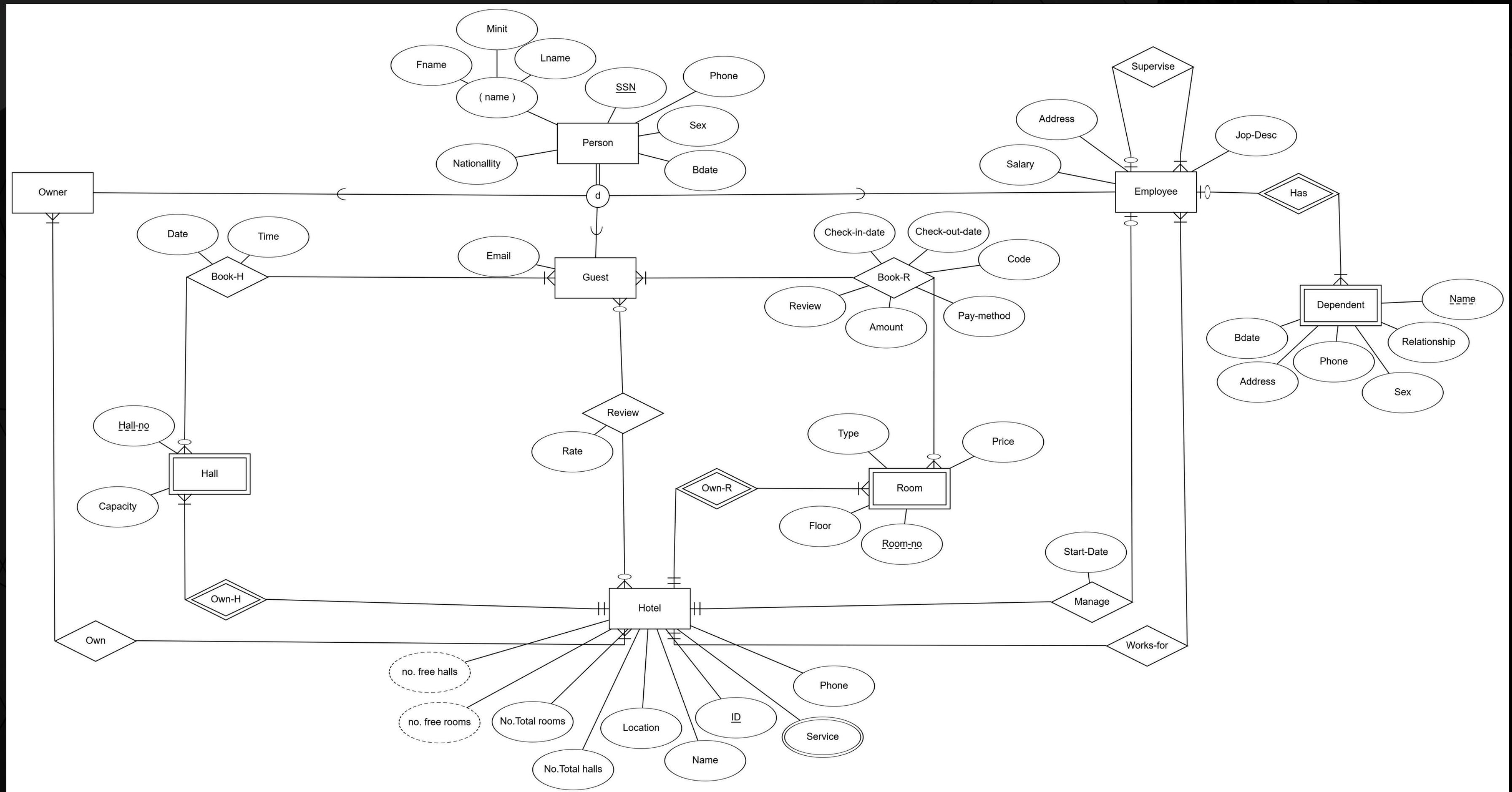
Review

Attributes:

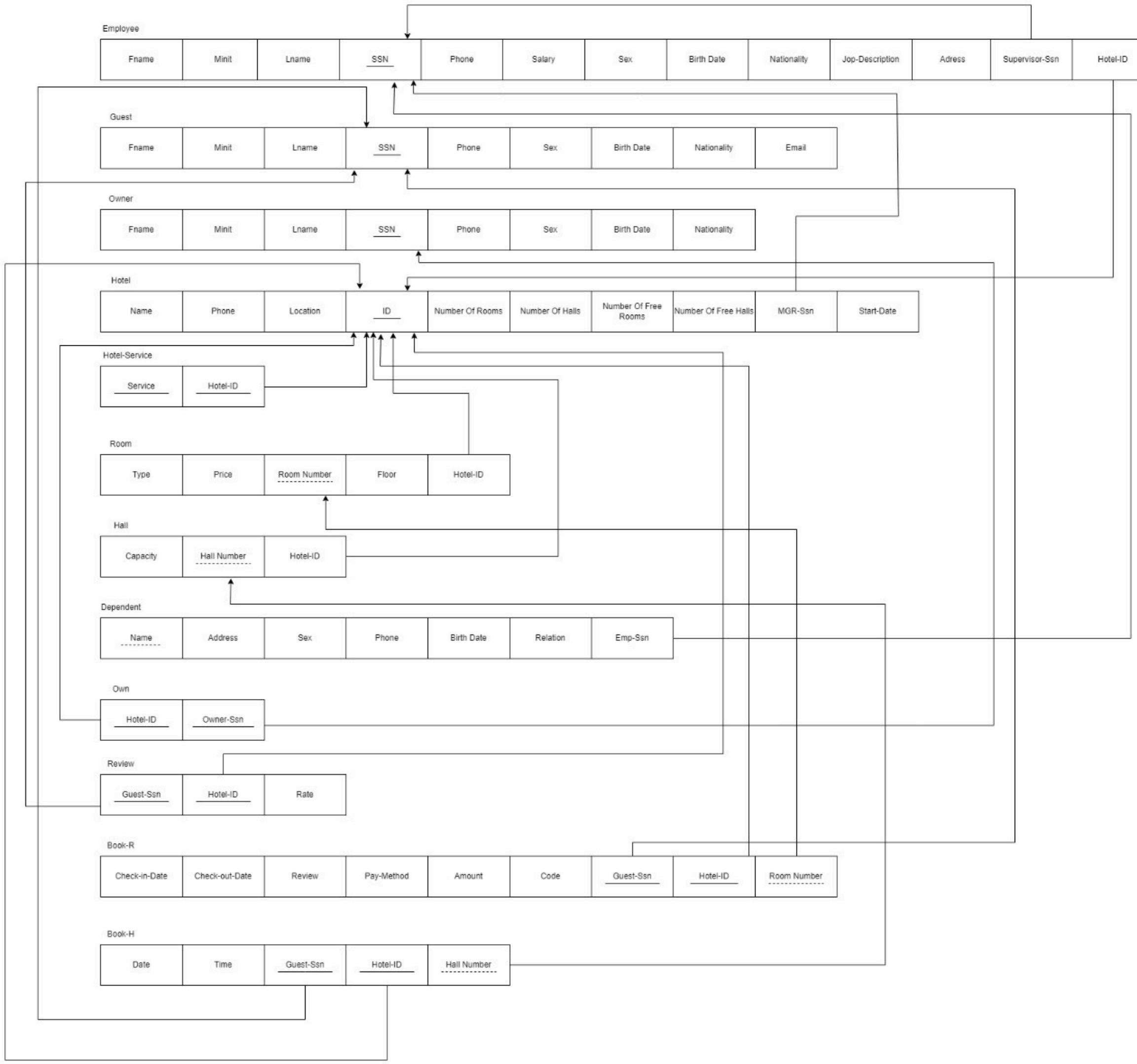
- Hotel_ID: ID of the hotel being reviewed.
- Guest_SSN: SSN of the guest leaving the review.
- Rate_stars: Rating provided by the guest. (Primary Key: Hotel_ID, Guest_SSN).

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ER_MODEL

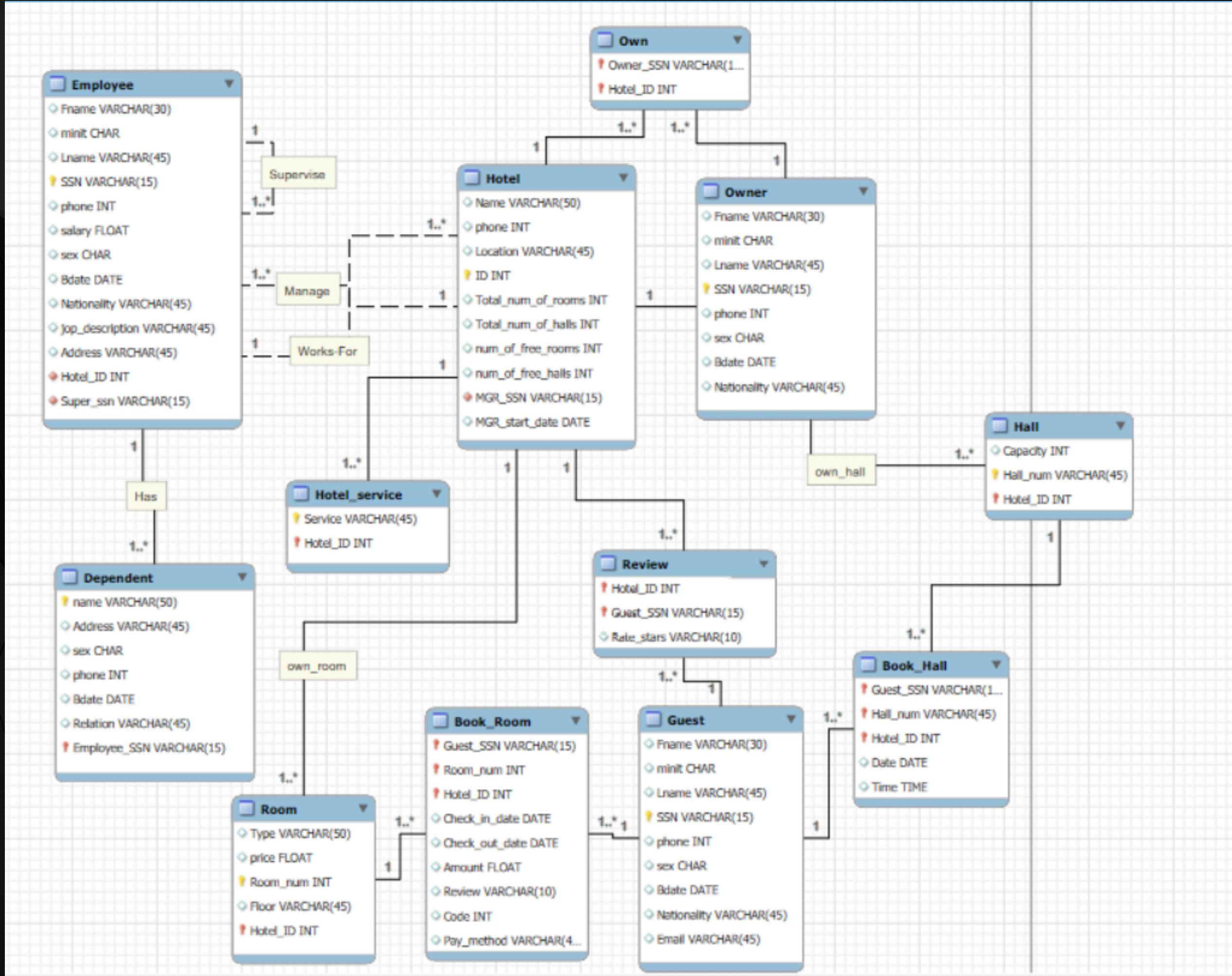


* Relational model





ER_MODEL Schema



*

Employee Data

```
1 SELECT *
2 FROM employee
```

Fname	minit	Lname	SSN	phone	salary	sex	Bdate	Nationality	jop_description	Address	Hotel_ID	Super_ssn
Tarek	A	El-Sayed	100000000005	567890123	2800	M	1987-12-12	Egyptian	Security Guard	Cairo, St.5	1	100000000001
Mona	A	Hassan	100000000006	678901234	3300	F	1986-11-25	Egyptian	Manager	Alexandria, St.1	2	NULL
Omar	S	Khalil	100000000007	789012345	2400	M	1990-06-30	Egyptian	Receptionist	Alexandria, St.2	2	100000000006
Fatma	M	Samy	100000000008	890123456	2600	F	1989-02-14	Egyptian	Chef	Alexandria, St.3	2	100000000006
Hassan	E	Abdallah	100000000009	901234567	2300	M	1993-01-10	Egyptian	Housekeeper	Alexandria, St.4	2	100000000006
Laila	K	Sayed	100000000010	1023456789	2500	F	1991-04-20	Egyptian	Security Guard	Alexandria, St.5	2	100000000006
Youssef	A	Khaled	100000000011	123456789	3200	M	1985-05-15	Egyptian	Manager	Giza, St.1	3	NULL
Rania	H	Saleh	100000000012	234567890	2300	F	1990-09-20	Egyptian	Receptionist	Giza, St.2	3	100000000011
Samir	M	Ali	100000000013	345678901	2400	M	1988-12-12	Egyptian	Chef	Giza, St.3	3	100000000011
Dalia	S	Fathy	100000000014	456789012	2200	F	1992-06-30	Egyptian	Housekeeper	Giza, St.4	3	100000000011
Khaled	A	Mohamed	100000000015	567890123	2700	M	1987-08-25	Egyptian	Security Guard	Giza, St.5	3	100000000011
Zainab	M	Shahin	100000000016	678901234	3400	F	1984-11-10	Egyptian	Manager	Luxor, St.1	4	NULL
Ramy	A	Salah	100000000017	789012345	2500	M	1991-03-05	Egyptian	Receptionist	Luxor, St.2	4	100000000016
Amira	H	Gamal	100000000018	890123456	2700	F	1987-09-22	Egyptian	Chef	Luxor, St.3	4	100000000016

employee 3 x

Apply

Revert

Guest Data

*

```
1  SELECT *
2  FROM guest
```

	Fname	minit	Lname	SSN	phone	sex	Bdate	Nationality	Email
▶	Ahmed	A	Sayed	2000000000001	101010	M	1990-05-10	Egyptian	ahmed.sayed1@gmail.com
	Mona	B	Hassan	2000000000002	102020	F	1993-03-15	Lebanese	mona.hassan2@gmail.com
	Liam	C	Williams	2000000000003	103030	M	1988-07-20	American	liam.williams3@gmail.com
	Farah	D	Kamal	2000000000004	104040	F	1995-10-05	Lebanese	farah.kamal4@gmail.com
	Omar	E	Mohamed	2000000000005	105050	M	1987-08-22	Egyptian	omar.mohamed5@gmail.com
	Sarah	F	Ahmed	2000000000006	106060	F	1994-01-14	Syrian	sarah.ahmed6@gmail.com
	Karim	G	Saleh	2000000000007	107070	M	1989-03-12	Egyptian	karim.saleh7@gmail.com
	Nadia	H	Mostafa	2000000000008	108080	F	1991-11-23	Jordanian	nadia.mostafa8@gmail.com
	Mateo	I	Garcia	2000000000009	109090	M	1985-07-18	Spanish	mateo.garcia9@gmail.com
	Laila	J	Hassan	2000000000010	110110	F	1992-12-01	Jordanian	laila.hassan10@gmail.com
	Tarek	K	Omar	2000000000011	111120	M	1986-03-30	Egyptian	tarek.omar11@gmail.com
	Sally	L	Nasr	2000000000012	112130	F	1992-07-17	Algerian	sally.nasr12@gmail.com
	Ibrahim	M	Zaki	2000000000013	113140	M	1993-01-20	Moroccan	ibrahim.zaki13@gmail.com
	Mariam	N	Tarek	2000000000014	114150	F	1995-11-11	Egyptian	mariam.tarek14@gmail.com

guest 9 ×

Output

Owner Data

```
1 SELECT *\n2 FROM owner
```

Hotel Data

*

```
1 • select * from hotel
```

Dependent Data

*

```
1  SELECT *
2  FROM dependent
```

	name	Address	sex	phone	Bdate	Relation	Employee_SSN
▶	Ali	Cairo	M	123456	2010-06-15	Son	100000000001
	Amira	Cairo	F	123481	2011-11-11	Daughter	100000000043
	Amr	Giza	M	123460	2009-01-05	Son	100000000008
	Dina	Alexandria	F	123459	2014-08-25	Daughter	100000000005
	Hassan	Alexandria	M	123479	2012-03-22	Son	100000000038
	Karim	Cairo	M	123480	2008-04-02	Son	100000000042
	Kemo	Cairo	M	123468	2009-11-03	Son	100000000029
	Khaled	Hurghada	M	123466	2007-10-10	Son	100000000024
	Mariam	Cairo	F	123469	2011-04-22	Daughter	100000000031
	Maya	Giza	F	123461	2011-09-15	Daughter	100000000010
	Moha...	Alexandria	M	123458	2011-04-20	Son	100000000003
	Mona	Sharm El ...	F	123465	2012-03-18	Daughter	100000000022
	Noha	Cairo	F	123463	2013-12-01	Daughter	100000000015
	Omar	Cairo	M	123462	2010-05-30	Son	100000000009

dependent 7 ×

Room Data

*

```
1  SELECT *
2  FROM room
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content

	Type	price	Room_num	Floor	Hotel_ID
▶	Single	100	101	1	1
	Double	150	102	1	1
	Suite	250	103	1	1
	Single	100	104	1	1
	Double	150	105	1	1
	Suite	250	106	2	1
	Single	100	107	2	1
	Double	150	108	2	1
	Suite	250	109	2	1
	Single	100	110	2	1
	Double	150	111	3	1
	Suite	250	112	3	1
	Single	100	113	3	1
	Double	150	114	3	1

room 16 x

Hall Data

1 SELECT *
2 FROM hall

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap

	Capacity	Hall_num	Hotel_ID
▶	100	101	1
	150	102	1
	200	103	1
	120	104	2
	160	105	2
	180	106	2
	90	107	3
	130	108	3
	150	109	3
	110	110	4
	140	111	4
	170	112	4
	200	113	5
	250	114	5

Book_Room Data

*

1 • `select * from book_room`

	Guest_SSN	Room_num	Hotel_ID	Check_in_date	Check_out_date	Amount	Review	Code	Pay_method
▶	200000000001	101	1	2024-12-10	2024-12-15	1000	Excellent	1234	Credit Card
	200000000002	102	1	2024-12-12	2024-12-17	1200	Good	1235	Cash
	200000000003	103	2	2024-12-01	2024-12-05	900	Very Good	1236	Debit Card
	200000000004	104	2	2024-12-08	2024-12-13	950	Good	1237	Credit Card
	200000000005	105	3	2024-12-10	2024-12-14	1100	Excellent	1238	Cash
	200000000006	106	3	2024-12-01	2024-12-06	1150	Good	1239	Debit Card
	200000000007	107	4	2024-12-02	2024-12-07	950	Very Good	1240	Credit Card
	200000000008	108	4	2024-12-04	2024-12-09	980	Good	1241	Cash
	200000000009	109	5	2024-12-06	2024-12-11	1020	Excellent	1242	Debit Card
	200000000010	110	5	2024-12-07	2024-12-12	1000	Good	1243	Credit Card
	200000000011	111	6	2024-12-05	2024-12-10	950	Very Good	1244	Cash
	200000000012	112	6	2024-12-02	2024-12-07	1200	Good	1245	Debit Card
	200000000013	113	7	2024-12-01	2024-12-06	1100	Excellent	1246	Credit Card

book_room3 ×

Book_Hall Data

*

```
1  SELECT *
2  FROM book_hall
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

	Guest_SSN	Hall_num	Hotel_ID	Date	Time
▶	2000000000001	1101	1	2024-12-10	10:00:00
	2000000000002	1102	1	2024-12-11	12:00:00
	2000000000003	1103	2	2024-12-12	14:00:00
	2000000000004	1104	2	2024-12-13	16:00:00
	2000000000005	1105	3	2024-12-14	18:00:00
	2000000000006	1106	3	2024-12-15	20:00:00
	2000000000007	1107	4	2024-12-16	09:00:00
	2000000000008	1108	4	2024-12-17	11:00:00
	2000000000009	1109	5	2024-12-18	13:00:00
	2000000000010	1110	5	2024-12-19	15:00:00
	2000000000011	1111	6	2024-12-20	17:00:00
	2000000000012	1112	6	2024-12-21	19:00:00
	2000000000013	1113	7	2024-12-22	21:00:00
	2000000000014	1114	7	2024-12-23	08:00:00

book_hall 4 ×

Hotel_Service Data

*

```
1  SELECT *
2  FROM hotel_service
```

Result Grid | Filter Rows: Edit: Export/Import: Write

Service	Hotel_ID
Bar	3
Bar	6
Bar	9
Children's Play Area	4
Conference Room	2
Conference Room	5
Conference Room	9
Free Breakfast	2
Free Breakfast	7
Free WiFi	1
Free WiFi	4
Free WiFi	6
Free WiFi	8
Free WiFi	9

hotel_service 12 ×

Own Data

*

```
1  SELECT *
2  FROM own
```

Result Grid | Filter Rows: Edit:

	Owner_SSN	Hotel_ID
▶	1001	1
	1001	2
	1002	2
	1003	3
	1004	4
	1005	5
	1005	8
	1006	6
	1007	7
	1008	8
	1009	9
	1010	10
	NULL	NULL

Review Data

*

1 • `select * from review`

Result Grid | Filter Rows: _____ | Edit: Export/Import:

	Hotel_ID	Guest_SSN	Rate_stars
▶	1	200000000001	5
	1	200000000002	4
	1	200000000003	5
	2	200000000004	4
	2	200000000005	3
	2	200000000006	4
	3	200000000007	5
	3	200000000008	4
	3	200000000009	5
	4	200000000010	5
	4	200000000011	3
	4	200000000012	4
	5	200000000013	5

review 2 x

* Query 1

1) retrieve the Name , SSN and Nationality for American Guests

The screenshot shows a MySQL Workbench interface with a query editor and a result grid.

Query Editor:

```
veryimp* 
1 • select fname,ssn,nationality
2 from guest
3 where Nationality = 'American'
```

Result Grid:

	fname	ssn	nationality
▶	Liam	200000000003	American
	Chris	2000000000050	American

* Query 2

2) retrieve the Total Number of Booked Rooms in each hotel

The screenshot shows a MySQL Workbench interface with a query editor and a result grid.

Query Editor:

```
veryimp* x
1 select name as 'HOTEL_NAME' , Total_num_of_rooms- num_of_free_rooms as 'TOTAL_NUMBER_OF_BOOKED_ROOMS'
2 from hotel
```

Result Grid:

HOTEL_NAME	TOTAL_NUMBER_OF_BOOKED_R
Pyramids View Hotel	5
Alexandria Beach Hotel	5
Luxor Royal Resort	10
Aswan Paradise Hotel	2
Cairo Nile Hotel	5
Hurghada Sea Resort	10
Sharm El-Sheikh Hotel	10
Fayoum Oasis Hotel	2
Suez Canal View Hotel	3
Port Said Marina Hotel	2

* Query 3

3) retrieve the name of employee who has letter (u) in his/her name and have salary between 2100 and 2500

The screenshot shows a MySQL Workbench interface with a query editor and a result grid.

Query Editor:

```
veryimp* x
1 • select fname, lname, salary
2 from employee
3 where fname like '%u%' and salary between 2100 and 2500
4
-
```

Result Grid:

	fname	lname	salary
▶	Noura	Ali	2200
	Mahmoud	Sherif	2300

* Query 4

4) retrieve the name of the guest who rate the hotel with 3 stars

The screenshot shows a MySQL Workbench interface with a query editor and a result grid.

Query Editor:

```
veryimp* x
1 • select g.fname as 'GUEST_NAME' , h.name as 'HOTEL_NAME' , r.Rate_stars
2   from guest g , hotel h , review r
3   where g.SSN = r.Guest_SSN and h.ID = r.Hotel_ID and r.Rate_stars = 3
```

Result Grid:

GUEST_NAME	HOTEL_NAME	Rate_stars
Omar	Alexandria Beach Hotel	3
Tarek	Aswan Paradise Hotel	3
Rania	Hurghada Sea Resort	3
Hany	Fayoum Oasis Hotel	3
Samir	Port Said Marina Hotel	3

* Query 5

5) retrieve the name of employee who's salary greater than average salary of employees

The screenshot shows a MySQL Workbench interface with a query editor and a result grid.

Query Editor:

```
veryimp* 
1 • select fname 'Employee_Name' , salary 'Salary'
2   from employee
3   where salary > (select avg(salary)
4     from employee)
5
```

Result Grid:

	Employee_Name	Salary
▶	Ahmed	3500
	Mohamed	2700
	Tarek	2800
	Mona	3300
	Youssef	3200
	Khaled	2700
	Zainab	3400
	Amira	2700
	Ahmed	3300
	Khaled	2700
	Yasmin	3400
	Zainab	2800

employee 14 x

* Query 6

6) retrieve the Average room price in each hotel

```
26 -- 6) retrieve the Average room price in each hotel
27 • SELECT h.Name , avg(r.price) 'Average_Room_Price'
28   FROM hotel h , room r
29 WHERE h.ID = r.Hotel_ID
30 GROUP BY h.ID;
```

Name	Average_Room_Price
Pyramids View Hotel	162.5
Alexandria Beach Hotel	172.5
Luxor Royal Resort	182.5
Aswan Paradise Hotel	192.5
Cairo Nile Hotel	212.5
Hurghada Sea Resort	222.5
Sharm El-Sheikh Hotel	232.5
Fayoum Oasis Hotel	242.5
Suez Canal View Hotel	252.5
Port Said Marina Hotel	262.5

* Query 7

7) retrieve the hotels that contain suit with price more than 320

```
1 -- 7) retrieve the hotels that contain suit with price more than 320
2 • SELECT distinct h.name
3   FROM hotel h , room r
4 WHERE r.Type = 'Suite' and r.price > 320 and r.Hotel_ID = h.ID
5 ORDER BY name;
```

Result Grid	
	name
▶	Fayoum Oasis Hotel
	Port Said Marina Hotel
	Suez Canal View Hotel

* Query 8

8) retrieve the dependent name who is a son for an employee

```
1 • select e.fname 'Employee',d.name 'Dependent',d.relation 'Relatonship'  
2   from employee e,dependent d  
3   where e.SSN = d.Employee_SSN and d.Relation = 'son'  
4
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

	Employee	Dependent	Relatonship
▶	Ahmed	Ali	Son
	Fatma	Amr	Son
	Ali	Hassan	Son
	Mohamed	Karim	Son
	Mahmoud	Kemo	Son
	Layla	Khaled	Son
	Mohamed	Mohamed	Son
	Hassan	Omar	Son
	Noha	Sheta	Son
	Maha	Tamer	Son
	Amira	Youssef	Son
	Fayza	Zenhom	Son

Result 34 ×

* Query 9

9) retrieve the Hotels with hall capacity greater than 200

The screenshot shows a MySQL query editor interface with the following details:

- Query Text:**

```
1 • select h.name 'Hotel_Name', hl.Hall_num 'Hall_Number', hl.capacity 'Hall_Capacity'  
2   from hotel h , hall hl  
3  where h.ID = hl.Hotel_ID and hl.Capacity > 200  
4
```
- Result Grid:** A table showing the retrieved data.
- Table Headers:** Hotel_Name, Hall_Number, Hall_Capacity
- Data Rows:**

Hotel_Name	Hall_Number	Hall_Capacity
Cairo Nile Hotel	114	250
Cairo Nile Hotel	115	220
Suez Canal View Hotel	126	220
Suez Canal View Hotel	127	250

* Query 10

10) retrieve the salaries of employee working as Housekeeper after increasing his/her salary by 10 percent raise

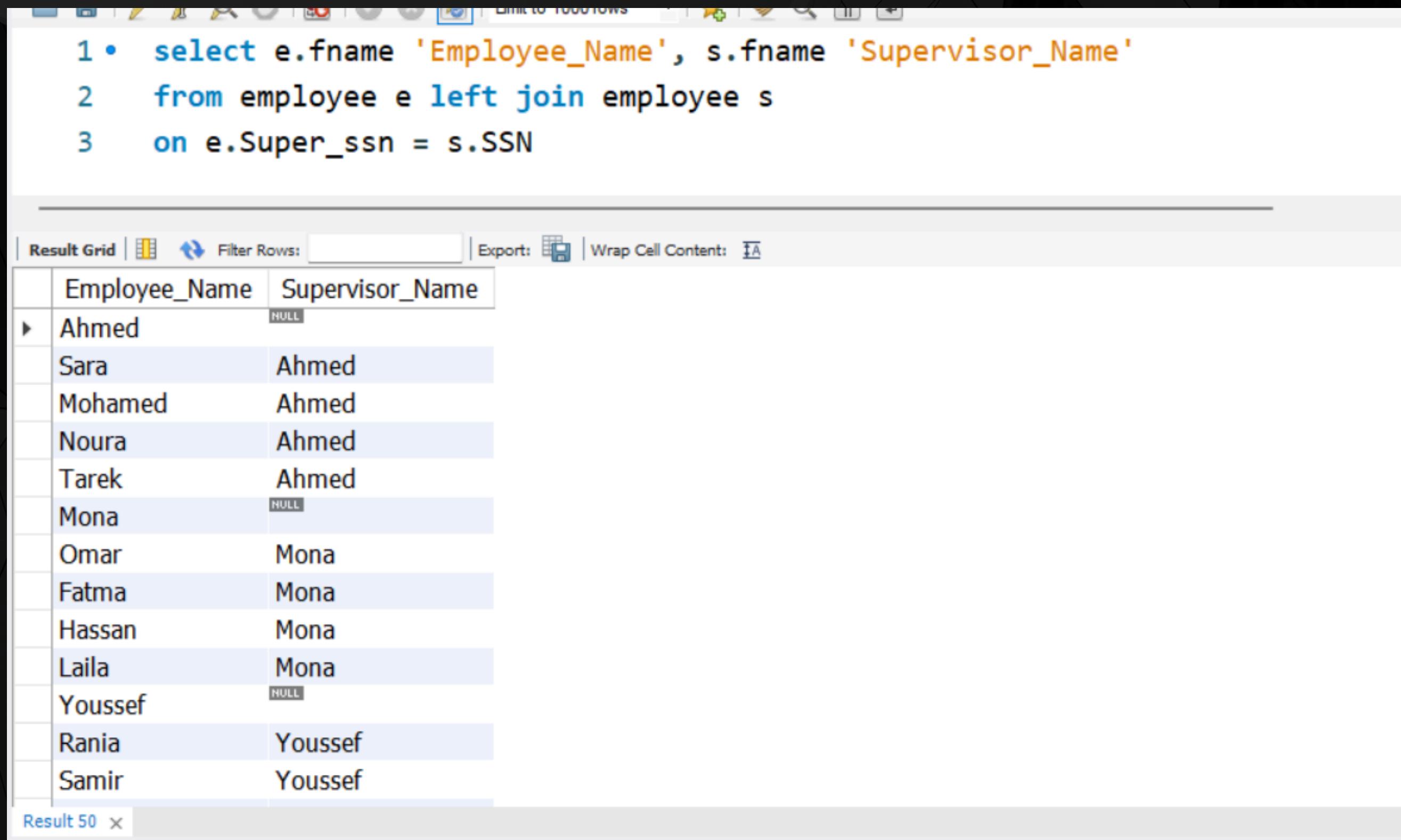
```
1  select e.fname 'Employee_Name', e.salary 'Current_salary' , 1.1* e.salary 'Increased_salary'  
2  from employee e  
3  where e.job_description = 'Housekeeper'  
4
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

	Employee_Name	Current_salary	Increased_salary
▶	Noura	2200	2420
	Hassan	2300	2530
	Dalia	2200	2420
	Tamer	2400	2640
	Layla	2200	2420
	Mahmoud	2300	2530
	Maha	2200	2420
	Mona	2200	2420
	Samira	2200	2420
	Fayza	2200	2420

* Query 11

11) retrieve the name of each employee and his/her supervisor



The screenshot shows a MySQL Workbench interface with a query editor and a result grid. The query editor contains the following SQL code:

```
1 • select e.fname 'Employee_Name', s.fname 'Supervisor_Name'  
2   from employee e left join employee s  
3     on e.Super_ssn = s.SSN
```

The result grid displays the following data:

	Employee_Name	Supervisor_Name
▶	Ahmed	NULL
	Sara	Ahmed
	Mohamed	Ahmed
	Noura	Ahmed
	Tarek	Ahmed
	Mona	NULL
	Omar	Mona
	Fatma	Mona
	Hassan	Mona
	Laila	Mona
	Youssef	NULL
	Rania	Youssef
	Samir	Youssef

At the bottom of the result grid, it says "Result 50".

* Query 12

12) retrieve the hotel with the highest number of free rooms

```
2 • SELECT Name 'Hotel_Name', num_of_free_rooms  
3   FROM Hotel  
4   WHERE num_of_free_rooms = (  
5       SELECT MAX(num_of_free_rooms) FROM Hotel  
6   );
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	Hotel_Name	num_of_free_rooms		
▶	Sharm El-Sheikh Hotel	140		

* Query 13

13) retrieve each hotel name along with it's maximum room price

```
64      -- 13) retrieve each hotel name along with it's maximum room price
65 •  SELECT h.name 'Hotel_Name' , max(r.price) 'Max_Room_Price'
66      FROM hotel h , room r
67      WHERE h.ID = r.Hotel_ID
68      GROUP BY h.name;
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

	Hotel_Name	Max_Room_Price
▶	Pyramids View Hotel	250
	Alexandria Beach Hotel	260
	Luxor Royal Resort	270
	Aswan Paradise Hotel	280
	Cairo Nile Hotel	300
	Durahada Sea Resort	210

Result 129 ×

* Query 14

14) retrieve the hotel name and owner name for owner who own more than one hotel

```
1  -- retrieve the hotel name and owner name for owners who own more than one hotel
2 • SELECT h.Name 'Hotel_Name' , o.Fname 'Owner_Name'
3   FROM Hotel h JOIN Own ow
4   ON h.ID = ow.Hotel_ID
5   JOIN Owner o
6   ON ow.Owner_SSN = o.SSN
7   WHERE ow.Owner_SSN IN(
8     SELECT Owner_SSN
9       FROM Own
10      GROUP BY Owner_SSN
11      HAVING COUNT(Hotel_ID) > 1
12 );
```

	Hotel_Name	Owner_Name
▶	Pyramids View Hotel	John
	Alexandria Beach Hotel	John
	Cairo Nile Hotel	Giovanni
	Fayoum Oasis Hotel	Giovanni

* Query 15

15) retrieve the female owners for hotels

```
2 •  SELECT h.Name 'Hotel_Name' , o.Fname 'Owner_Name'  
3      FROM Hotel h , own ow , owner o  
4     where h.id = ow.Hotel_ID and o.SSN = ow.Owner_SSN and o.sex = 'F'
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

	Hotel_Name	Owner_Name
▶	Alexandria Beach Hotel	Maria
	Aswan Paradise Hotel	Liu
	Hurghada Sea Resort	Sarah
	Fayoum Oasis Hotel	Aisha
	Port Said Marina Hotel	Natalia

* Query 16

16) retrieve the hotels that doesn't contain GYM

```
1 -- 16) retrieve the hotels that does't contain GYM
2 • select h.name 'Hotel_Name', h.ID , h.Location
3   from hotel h
4   where h.ID not in
5     (select Hotel_ID
6      from hotel_service
7      where service = 'GYM')
8   order by h.id;
```

Result Grid			
Edit: Export/Import: Wrap Cell Content:			
	Hotel_Name	ID	Location
▶	Luxor Royal Resort	3	Luxor
	Aswan Paradise Hotel	4	Aswan
	Hurghada Sea Resort	6	Hurghada
	Fayoum Oasis Hotel	8	Fayoum
	NULL	NULL	NULL
*			

* Query 17

17) retrieve the oldest manager(supervisor)

```
9  
10   -- 17) retrieve the oldest manager(supervisor)  
11 • SELECT Fname 'First_Name' , SSN 'Supervisor_SSN' , Bdate 'Birthdate'  
12   FROM Employee  
13   WHERE SSN IN (SELECT DISTINCT Super_ssn  
14           FROM Employee)  
15   ORDER BY Bdate ASC  
16   LIMIT 1;  
17  
18  
19  
20 |
```

First_Name	Supervisor_SSN	Birthdate
Yasmin	100000000026	1983-12-30

* Query 18

18) retrieve the phone number of Alexandria Beach Hotel manager

```
18  -- 18) retrieve the phone number of Alexandria Beach Hotel manager
19 • SELECT e.fname 'Manager_Name', e.phone 'Manager_Phone'
20   FROM Employee e , hotel h
21 WHERE e.ssn = h.MGR_SSN and h.Name = 'Alexandria Beach Hotel';
22
23
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	Manager_Name	Manager_Phone		
▶	Mona	678901234		

* Query 19

19) retrieve the guest which pay cash and rate room with Excellent review

```
23 -- 19) retrieve the guest which pay cash and rate room with Excellent review
24 • select g.fname 'Guest_Name',r.Room_num , br.Pay_method
25   from guest g , book_room br , room r
26   where g.SSN = br.Guest_SSN and br.Room_num = r.Room_num and br.Pay_method = 'cash'
27   and br.Review = 'Excellent';
28
```

Result Grid			
	Guest_Name	Room_num	Pay_method
▶	Omar	105	Cash

* Query 20

20) retrieve the number of guests from each nationality:

```
32      -- 20) retrieve the number of guests from each nationality:  
33 •  SELECT Nationality, COUNT(*) 'Total_Guest_Count'  
34   FROM Guest  
35   GROUP BY Nationality;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

Nationality	Total_Guest_Count
Egyptian	23
Lebanese	4
American	2
Syrian	1
Jordanian	2
Spanish	1
Algerian	1
Moroccan	1
Mexican	2
Serbian	1
Somali	1
Italian	1
Swedish	1
Kuwaiti	1
Pakistani	1

* Query 21

21) retrieve the average rate for each hotel

```
43    -- 21) retrieve the average rate for each hotel
44 • SELECT Hotel_ID, AVG(CAST(Rate_stars AS DECIMAL)) AS Average_Rating
45   FROM Review
46   GROUP BY Hotel_ID;
47
```

Result Grid | Filter Rows: _____ | Export: Wrap Cell Content:

	Hotel_ID	Average_Rating
▶	1	4.6667
	2	3.6667
	3	4.6667
	4	4.0000
	5	4.3333
	6	4.0000
	7	4.3333
	8	4.0000
	9	4.6667
	10	4.0000



DATABASE



THANK YOU



9 December, 2024