

SQL/No-SQL Based Architecture

Group-6

Rooms

	RoomID	Room Type	Price	Status
▶	101	Suite	3000	Occupied
	102	Deluxe	2250	Available
	103	Standard	1800	Occupied
	104	Double Room	2500	Available
	105	Presidential Suite	4500	Available
	201	Queen Room	2800	Occupied
	202	Non-AC Single	1200	Occupied
	203	Deluxe	2250	Occupied
	204	Queen Room	2800	Available
	205	Deluxe	2250	Available
	301	Standard	1800	Available
	302	Presidential Suite	4500	Available
	303	King Room	3200	Available
	304	Non-AC Single	1200	Available
	305	Deluxe	2250	Available
	401	Standard	1800	Available
	402	Non-AC Single	1200	Occupied
	403	Suite	3000	Occupied
	404	Deluxe	2250	Occupied
	405	Standard	1800	Available
	501	Double Room	2500	Available
	502	Presidential Suite	4500	Occupied
	503	Queen Room	2800	Available
	504	Non-AC Single	1200	Available
	505	Queen Room	2800	Available

Guests

	GuestID	Name	Email	Mobile Number	Address	No of Guests
▶	G1	John	john12@gmail.com	7867980987	Oak Street	1
	G10	Karan	karan56@gmail.com	6611223344	Church Road	1
	G11	Denver	denver678@gmail.com	9864580987	Oak Street	3
	G12	Emily	emilyparis@gmail.com	8867980987	Park Avenue	2
	G13	Steve	steve234@gmail.com	6787980987	Pine Street	4
	G14	Alina	alinasmith@gmail.com	9877980987	Stevens Road	2
	G15	Lisa	lisabp@gmail.com	8800994455	Maple Road	1
	G16	Mary	mary456@gmail.com	9900880066	Park street	2
	G17	Emerson	emerson789@gmail.com	7700990011	Eat street lane	3
	G18	Smith	smithagyu@gmail.com	9944332200	Railway lane	4
	G19	Sally	sallyjer@gmail.com	8809678909	Oak Street	2
	G2	Jamie	jamie45@gmail.com	9977668889	Park Avenue	2
	G20	Monroe	monroe678@gmail.com	8844332266	Park Avenue	4
	G21	Elizabeth	elizabeth789@gmail.com	9922668844	Pine Street	1
	G22	Zoe	zoedo34@gmail.com	8712357890	Church Road	4
	G23	Zara	zarayui@gmail.com	9257123098	Maple Road	2
	G24	Nikky	nikkywer@gmail.com	8967094567	Park street	4
	G25	Tom	tom234@gmail.com	7098459988	Eat street lane	1
	G3	Lily	Lily12@gmail.com	8877998877	Maple Road	4
	G4	Louis	louis4578@gmail.com	6677667788	Park street	2
	G5	Harry	harryjui23@gmail.com	7788997788	Eat street lane	2
	G6	Jake	jake678er@gmail.com	9867897867	Church Road	1
	G7	Alice	alicejhyu@gmail.com	7755443322	Stevens Road	2
	G8	Henry	henrytyu@gmail.com	7755112233	Railway lane	4
	G9	Vicky	vickyhome@gmail.com	8899443322	Pine Street	2

Bookings

	BookingID	GUESTID	RoomID	Price	Status	CheckInDate	CheckOutDate
▶	BID1	G1	101	3000	Confirmed	2024-03-10	2024-03-11
	BID10	G10	105	4500	Confirmed	2024-01-05	2024-01-06
	BID11	G11	304	1200	Confirmed	2024-03-10	2024-03-11
	BID12	G12	305	2250	Confirmed	2024-07-25	2024-07-26
	BID13	G13	401	1800	Cancelled	2024-05-26	2024-06-26
	BID14	G14	402	1200	Cancelled	2024-10-16	2024-10-17
	BID15	G15	403	3000	Confirmed	2024-03-10	2024-03-11
	BID16	G16	404	2250	Cancelled	2024-08-14	2024-08-15
	BID17	G17	405	1800	Confirmed	2024-11-10	2024-11-11
	BID18	G18	501	2500	Cancelled	2024-07-25	2024-07-26
	BID19	G19	502	4500	Cancelled	2024-12-08	2024-12-09
	BID2	G2	102	2250	Confirmed	2024-05-26	2024-06-26
	BID20	G20	503	2800	Confirmed	2024-01-01	2024-01-02
	BID21	G21	504	1200	Cancelled	2024-10-16	2024-10-17
	BID22	G22	505	2800	Cancelled	2024-03-10	2024-03-11
	BID23	G23	304	1200	Cancelled	2024-05-26	2024-06-26
	BID24	G24	305	2250	Confirmed	2024-07-25	2024-07-26
	BID25	G25	401	1800	Confirmed	2024-03-10	2024-03-11
	BID3	G3	103	1800	Confirmed	2024-10-15	2024-10-16
	BID4	G4	104	2500	Confirmed	2024-07-25	2024-07-26
	BID5	G5	105	4500	Confirmed	2024-05-26	2024-06-26

	BID6	G6	201	2800	Confirmed	2024-10-16	2024-10-17
	BID7	G7	202	1200	Confirmed	2024-06-07	2024-06-08
	BID8	G8	203	2250	Confirmed	2024-05-26	2024-06-26
	BID9	G9	204	2800	Confirmed	2024-01-01	2024-01-02

Services

	ServiceID	BookingID	Service	Price
►	SID 1	BID 1	Room Service	500
	SID 10	BID 4	Room Service	500
	SID 11	BID 5	Room Service	500
	SID 12	BID 1	Gym	400
	SID 13	BID 6	Laundry	300
	SID 14	BID 5	Spa	1200
	SID 15	BID 15	Restaurant	4000
	SID 16	BID 6	Room Service	500
	SID 17	BID 20	Room Service	500
	SID 18	BID 9	Room Service	500
	SID 19	BID 7	Gym	400
	SID 2	BID 3	Gym	400
	SID 20	BID 10	Laundry	300
	SID 21	BID 8	Room Service	500
	SID 22	BID 9	Room Service	500
	SID 23	BID 6	Gym	400
	SID 24	BID 8	Laundry	300
	SID 25	BID 12	Restaurant	1878
	SID 3	BID 1	Laundry	300
	SID 4	BID 3	Spa	800
	SID 5	BID 1	Restaurant	3000
	SID 6	BID 4	Restaurant	2500
	SID 7	BID 2	Room Service	500
	SID 8	BID 4	Spa	800
	SID 9	BID 2	Restaurant	4000

Staff

	StaffID	Name	Mobile Number	Email	Position
►	STID1	Rahul Sharma	9876543210	rahul.sharma@hotelxyz.com	General Manager
	STID10	Sneha Iyer	7890456123	sneha.iyer@hotelxyz.com	Laundry Supervisor
	STID11	Mohit Chawla	9002345671	mohit.chawla@hotelxyz.com	Laundry Supervisor
	STID12	Pooja Nair	8123567809	pooja.nair@hotelxyz.com	HR Manager
	STID13	Vikram Singh	9321456789	vikram.singh@hotelxyz.com	Executive Chef
	STID14	Neha Jain	7891234056	neha.jain@hotelxyz.com	Pastry Chef
	STID15	Aditya Kulkarni	8076543219	aditya.kulkarni@hotelxyz.com	IT Specialist
	STID16	Ritu Tiwari	9867543210	ritu.tiwari@hotelxyz.com	Pastry Chef
	STID17	Karan Malhotra	8765432109	karan.malhotra@hotelxyz.com	Security Supervisor
	STID18	Swati Desai	9012345678	swati.desai@hotelxyz.com	Spa Manager
	STID19	Rohit Bansal	9874012356	rohit.bansal@hotelxyz.com	Sales Executive
	STID2	Priya Mehta	8765432190	priya.mehta@hotelxyz.com	Front Office Mana...
	STID20	Deepa Arora	8567890123	deepa.arora@hotelxyz.com	Reservations Man...
	STID21	Varun Khanna	9123456781	varun.khanna@hotelxyz.com	Training Coordinator
	STID22	Meera Reddy	7890567123	meera.reddy@hotelxyz.com	Laundry Supervisor
	STID23	Arvind Prakash	7012987654	arvind.prakash@hotelxyz.com	Spa Manager
	STID24	Tanya Chopra	8901234578	tanya.chopra@hotelxyz.com	Training Coordinator
	STID25	Vishal Pandey	9876134209	vishal.pandey@hotelxyz.com	Banquet Manager
	STID3	Anil Verma	9123456780	anil.verma@hotelxyz.com	Executive Chef
	STID4	Nisha Kapoor	7890123456	nisha.kapoor@hotelxyz.com	Housekeeping Man...
	STID5	Arjun Das	7012345678	arjun.das@hotelxyz.com	Executive Chef
	STID6	Riya Sen	8501234567	riya.sen@hotelxyz.com	Restaurant Super...
	STID7	Sanjay Reddy	8123456709	sanjay.reddy@hotelxyz.com	Bar Manager
	STID8	Kavita Joshi	9876123450	kavita.joshi@hotelxyz.com	Events Coordinator
	STID9	Raiesh Gupta	7012567890	raiesh.gupta@hotelxvz.com	Maintenance Mana...

Queries

1. Use JOIN queries to link guests with bookings and services.

```

SELECT Guests.GuestID, Guests.Name,
       Bookings.BookingID, Bookings.RoomID, Bookings.CheckINDate, Bookings.CheckOutDate,
       Bookings.Price, Bookings.Status,
       Services.ServiceID, Services.Service, Services.Price AS ServicePrice
FROM Guests INNER JOIN Bookings
ON Guests.GuestID=Bookings.GuestID LEFT JOIN Services
ON Bookings.BookingID=Services.BookingID
ORDER BY Guests.GuestID, Bookings.BookingID, Services.ServiceID;

```

	GuestID	Name	BookingID	RoomID	CheckINDate	CheckOutDate	Price	Status	ServiceID	Service	ServicePrice
►	G1	John	BID1	101	2024-03-10	2024-03-11	3000	Confirmed	SID1	Room Service	500
	G1	John	BID1	101	2024-03-10	2024-03-11	3000	Confirmed	SID12	Gym	400
	G1	John	BID1	101	2024-03-10	2024-03-11	3000	Confirmed	SID3	Laundry	300
	G1	John	BID1	101	2024-03-10	2024-03-11	3000	Confirmed	SID5	Restaurant	3000
	G10	Karan	BID10	105	2024-01-05	2024-01-06	4500	Confirmed	SID20	Laundry	300
	G11	Denver	BID11	304	2024-03-10	2024-03-11	1200	Confirmed	NULL	NULL	NULL
	G12	Emily	BID12	305	2024-07-25	2024-07-26	2250	Confirmed	SID25	Restaurant	1878
	G13	Steve	BID13	401	2024-05-26	2024-06-26	1800	Cancelled	NULL	NULL	NULL
	G14	Alina	BID14	402	2024-10-16	2024-10-17	1200	Cancelled	NULL	NULL	NULL
	G15	Lisa	BID15	403	2024-03-10	2024-03-11	3000	Confirmed	SID15	Restaurant	4000
	G16	Mary	BID16	404	2024-08-14	2024-08-15	2250	Cancelled	NULL	NULL	NULL
	G17	Emerson	BID17	405	2024-11-10	2024-11-11	1800	Confirmed	NULL	NULL	NULL
	G18	Smith	BID18	501	2024-07-25	2024-07-26	2500	Cancelled	NULL	NULL	NULL
	G19	Sally	BID19	502	2024-12-08	2024-12-09	4500	Cancelled	NULL	NULL	NULL
	G2	Jamie	BID2	102	2024-05-26	2024-06-26	2250	Confirmed	SID7	Room Service	500
	G2	Jamie	BID2	102	2024-05-26	2024-06-26	2250	Confirmed	SID9	Restaurant	4000
	G20	Monroe	BID20	503	2024-01-01	2024-01-02	2800	Confirmed	SID17	Room Service	500
	G21	Elizabeth	BID21	504	2024-10-16	2024-10-17	1200	Cancelled	NULL	NULL	NULL
	G22	Zoe	BID22	505	2024-03-10	2024-03-11	2800	Cancelled	NULL	NULL	NULL
	G23	Zara	BID23	304	2024-05-26	2024-06-26	1200	Cancelled	NULL	NULL	NULL
	G24	Nikky	BID24	305	2024-07-25	2024-07-26	2250	Confirmed	NULL	NULL	NULL
	G25	Tom	BID25	401	2024-03-10	2024-03-11	1800	Confirmed	NULL	NULL	NULL
	G3	Lily	BID3	103	2024-10-15	2024-10-16	1800	Confirmed	SID2	Gym	400
	G3	Lily	BID3	103	2024-10-15	2024-10-16	1800	Confirmed	SID4	Spa	800
	G4	Louis	BID4	104	2024-07-25	2024-07-26	2500	Confirmed	SID10	Room Service	500
	G4	Louis	BID4	104	2024-07-25	2024-07-26	2500	Confirmed	SID6	Restaurant	2500
	G4	Louis	BID4	104	2024-07-25	2024-07-26	2500	Confirmed	SID8	Spa	800
	G5	Harry	BID5	105	2024-05-26	2024-06-26	4500	Confirmed	SID11	Room Service	500
	G5	Harry	BID5	105	2024-05-26	2024-06-26	4500	Confirmed	SID14	Spa	1200
	G6	Jake	BID6	201	2024-10-16	2024-10-17	2800	Confirmed	SID13	Laundry	300
	G6	Jake	BID6	201	2024-10-16	2024-10-17	2800	Confirmed	SID16	Room Service	500
	G6	Jake	BID6	201	2024-10-16	2024-10-17	2800	Confirmed	SID23	Gym	400
	G7	Alice	BID7	202	2024-06-07	2024-06-08	1200	Confirmed	SID19	Gym	400
	G8	Henry	BID8	203	2024-05-26	2024-06-26	2250	Confirmed	SID21	Room Service	500
	G8	Henry	BID8	203	2024-05-26	2024-06-26	2250	Confirmed	SID24	Laundry	300
	G9	Vicky	BID9	204	2024-01-01	2024-01-02	2800	Confirmed	SID18	Room Service	500
	G9	Vicky	BID9	204	2024-01-01	2024-01-02	2800	Confirmed	SID22	Room Service	500

2. Calculate occupancy rates and revenue from bookings and services.

A. Occupancy Rate = Total Confirmed Bookings / Total Bookings

Total Revenue = Bookings Revenue + Services Revenue

Bookings Revenue = Confirmed Bookings Price + (Cancelled Bookings * 0.3)

We assumed that we would deduct 30% and refund 70% to the customer so deducted 30% would be our revenue from the cancelled bookings.

1) Occupancy Rate

#Calculate Occupancy Rate

```
SELECT COUNT(RoomID) AS TotalBookedRooms, COUNT(
CASE
    WHEN Status='Confirmed' THEN RoomID
END) AS OccupiedRooms,
ROUND( (COUNT (
CASE
```

WHEN Status='Confirmed' THEN RoomID
END)) *100 / COUNT(RoomID), 2) AS OccupancyRate FROM Bookings;

	TotalBookedRooms	OccupiedRooms	OccupancyRate
▶	25	17	68.00

2) Total Revenue

#Revenue from Bookings ->deduct 30% from cancelled

#Calculate ConfirmedRevenue and Cancelled Revenue

SELECT SUM(Price) AS ConfirmedPrice FROM Bookings WHERE Status='Confirmed';

SELECT SUM(Price*0.3) AS CancelledPrice FROM Bookings WHERE Status='Cancelled';

	ConfirmedPrice		CancelledPrice
▶	42700	▶	5235.0

#Calculate Bookings Revenue

SELECT SUM(CASE WHEN Status='Confirmed' THEN Price

WHEN Status='Cancelled' THEN Price * 0.3 Else 0 END) AS BookingRevenue FROM
Bookings;

	BookingRevenue
▶	47935.0

#Calculate Service Revenue

SELECT SUM(Price)AS ServiceRevenue FROM Services;

	ServiceRevenue
▶	25478

#Calculate Total Revenue

SELECT(SELECT SUM(CASE WHEN Status='Confirmed' THEN Price

WHEN Status='Cancelled' THEN Price * 0.3 Else 0 END) FROM Bookings) AS
BookingRevenue,

(SELECT SUM(Price) FROM Services) AS ServiceRevenue,((SELECT SUM(CASE WHEN
Status='Confirmed' THEN Price

WHEN Status='Cancelled' THEN Price * 0.3 Else 0 END) FROM Bookings) + (SELECT SUM(Price) FROM Services))

AS TotalRevenue;

	BookingRevenue	ServiceRevenue	TotalRevenue
►	47935.0	25478	73413.0

Other Queries

1. JOIN queries for table relationships.

1.Display all guest details and Booking Information.

SELECT Guests.GuestID,Guests.Name,Guests.Email,Guests.MobileNumber,

Bookings.BookingID,Bookings.RoomID AS RoomNumber,Bookings.Status,Bookings.

CheckInDate, Bookings.CheckOutDate FROM Guests INNER JOIN Bookings

ON Guests.GuestID=Bookings.GuestID;

	GuestID	Name	Email	MobileNumber	BookingID	RoomNumber	Status	CheckInDate	CheckOutDate
►	G1	John	john12@gmail.com	7867980987	BID1	101	Confirmed	2024-03-10	2024-03-11
	G10	Karan	karan56@gmail.com	6611223344	BID10	105	Confirmed	2024-01-05	2024-01-06
	G11	Denver	denver678@gmail.com	9864580987	BID11	304	Confirmed	2024-03-10	2024-03-11
	G12	Emily	emilyparis@gmail.com	8867980987	BID12	305	Confirmed	2024-07-25	2024-07-26
	G13	Steve	steve234@gmail.com	6787980987	BID13	401	Cancelled	2024-05-26	2024-06-26
	G14	Alina	alinasmith@gmail.com	9877980987	BID14	402	Cancelled	2024-10-16	2024-10-17
	G15	Lisa	lisabp@gmail.com	8800994455	BID15	403	Confirmed	2024-03-10	2024-03-11
	G16	Mary	mary456@gmail.com	9900880066	BID16	404	Cancelled	2024-08-14	2024-08-15
	G17	Emerson	emerson789@gmail.com	7700990011	BID17	405	Confirmed	2024-11-10	2024-11-11
	G18	Smith	smithagyu@gmail.com	9944332200	BID18	501	Cancelled	2024-07-25	2024-07-26
	G19	Sally	sallyjer@gmail.com	8809678909	BID19	502	Cancelled	2024-12-08	2024-12-09
	G2	Jamie	jamie45@gmail.com	9977668889	BID2	102	Confirmed	2024-05-26	2024-06-26
	G20	Monroe	monroe678@gmail.com	8844332266	BID20	503	Confirmed	2024-01-01	2024-01-02
	G21	Elizabeth	elizabeth789@gmail.com	9922668844	BID21	504	Cancelled	2024-10-16	2024-10-17
	G22	Zoe	zoedo34@gmail.com	8712357890	BID22	505	Cancelled	2024-03-10	2024-03-11
	G23	Zara	zarayui@gmail.com	9257123098	BID23	304	Cancelled	2024-05-26	2024-06-26
	G24	Nikky	nikkywer@gmail.com	8967094567	BID24	305	Confirmed	2024-07-25	2024-07-26
	G25	Tom	tom234@gmail.com	7098459988	BID25	401	Confirmed	2024-03-10	2024-03-11
	G3	Lily	Lily12@gmail.com	8877998877	BID3	103	Confirmed	2024-10-15	2024-10-16
	G4	Louis	louis4578@gmail.com	6677667788	BID4	104	Confirmed	2024-07-25	2024-07-26
	G5	Harry	harryjui23@gmail.com	7788997788	BID5	105	Confirmed	2024-05-26	2024-06-26
	G6	Jake	jake678er@gmail.com	9867897867	BID6	201	Confirmed	2024-10-16	2024-10-17
	G7	Alice	alicejhyu@gmail.com	7755443322	BID7	202	Confirmed	2024-06-07	2024-06-08
	G8	Henry	henrytyu@gmail.com	7755112233	BID8	203	Confirmed	2024-05-26	2024-06-26
	G9	Vicky	vickyhome@gmail.com	8899443322	BID9	204	Confirmed	2024-01-01	2024-01-02

2.Display all the services availed by the Guests.

SELECT Guests.GuestID,Guests.Name,Services.ServiceID,Services.Service,Services.Price AS ServicePrice

FROM Guests INNER JOIN Bookings

ON Guests.GuestID=Bookings.GuestID

INNER JOIN Services ON Bookings.BookingID=Services.BookingID ORDER BY
Guests.GuestID;

	GuestID	Name	ServiceID	Service	ServicePrice
►	G1	John	SID1	Room Service	500
	G1	John	SID12	Gym	400
	G1	John	SID3	Laundry	300
	G1	John	SID5	Restaurant	3000
	G10	Karan	SID20	Laundry	300
	G12	Emily	SID25	Restaurant	1878
	G15	Lisa	SID15	Restaurant	4000
	G2	Jamie	SID7	Room Service	500
	G2	Jamie	SID9	Restaurant	4000
	G20	Monroe	SID17	Room Service	500
	G3	Lily	SID2	Gym	400
	G3	Lily	SID4	Spa	800
	G4	Louis	SID10	Room Service	500
	G4	Louis	SID6	Restaurant	2500
	G4	Louis	SID8	Spa	800
	G5	Harry	SID11	Room Service	500
	G5	Harry	SID14	Spa	1200
	G6	Jake	SID13	Laundry	300
	G6	Jake	SID16	Room Service	500
	G6	Jake	SID23	Gym	400
	G7	Alice	SID19	Gym	400
	G8	Henry	SID21	Room Service	500
	G8	Henry	SID24	Laundry	300
	G9	Vicky	SID18	Room Service	500
	G9	Vicky	SID22	Room Service	500

2. Aggregate functions for insights (e.g., SUM, AVG, COUNT).

1. How many cancelled and confirmed bookings are made?

SELECT Status, COUNT(BookingID) AS BookingCount FROM Bookings GROUP BY Status;

	Status	BookingCount
►	Confirmed	17
	Cancelled	8

2. What is the total service cost availed by each service type?

SELECT Service, SUM(Price) AS ServicePrice FROM Services GROUP BY Service;

	Service	ServicePrice
►	Room Service	4500
	Gym	1600
	Laundry	1200
	Spa	2800
	Restaurant	15378

3. Display Prices of different rooms in descending order.

SELECT DISTINCT(RoomType), Price FROM Rooms ORDER BY Price DESC;

	RoomType	Price
►	Presidential Suite	4500
	King Room	3200
	Suite	3000
	Queen Room	2800
	Double Room	2500
	Deluxe	2250
	Standard	1800
	Non-AC Single	1200

3. Queries demonstrating data filtering (WHERE, HAVING).

1. Display all services with price above 500

SELECT ServiceID, Service, Price FROM Services where Price>500;

	ServiceID	Service	Price
►	SID14	Spa	1200
	SID15	Restaurant	4000
	SID25	Restaurant	1878
	SID4	Spa	800
	SID5	Restaurant	3000
	SID6	Restaurant	2500
	SID8	Spa	800
	SID9	Restaurant	4000

2. Display all bookings from Jan 1 2024 to August 1 2024.

SELECT BookingID, GuestID,RoomID,CheckInDate,CheckOutDate FROM Bookings
WHERE CheckInDate BETWEEN '2024-01-01' AND '2024-08-01';

	BookingID	GuestID	RoomID	CheckInDate	CheckOutDate
►	BID1	G1	101	2024-03-10	2024-03-11
	BID10	G10	105	2024-01-05	2024-01-06
	BID11	G11	304	2024-03-10	2024-03-11
	BID12	G12	305	2024-07-25	2024-07-26
	BID13	G13	401	2024-05-26	2024-06-26
	BID15	G15	403	2024-03-10	2024-03-11
	BID18	G18	501	2024-07-25	2024-07-26
	BID2	G2	102	2024-05-26	2024-06-26
	BID20	G20	503	2024-01-01	2024-01-02
	BID22	G22	505	2024-03-10	2024-03-11
	BID23	G23	304	2024-05-26	2024-06-26
	BID24	G24	305	2024-07-25	2024-07-26
	BID25	G25	401	2024-03-10	2024-03-11
	BID4	G4	104	2024-07-25	2024-07-26
	BID5	G5	105	2024-05-26	2024-06-26
	BID7	G7	202	2024-06-07	2024-06-08
	BID8	G8	203	2024-05-26	2024-06-26
	BID9	G9	204	2024-01-01	2024-01-02

3. Display Staff details whose names are ending with 'A'

SELECT Name,Email,Position FROM Staff where Name LIKE '%A';

	StaffID	Name	Mobile Number	Email	Position
►	STID1	Rahul Sharma	9876543210	rahul.sharma@hotelxyz.com	General Manager
	STID11	Mohit Chawla	9002345671	mohit.chawla@hotelxyz.com	Laundry Supervisor
	STID17	Karan Malhotra	8765432109	karan.malhotra@hotelxyz.com	Security Supervisor
	STID2	Priya Mehta	8765432190	priya.mehta@hotelxyz.com	Front Office Manager
	STID20	Deepa Arora	8567890123	deepa.arora@hotelxyz.com	Reservations Manager
	STID21	Varun Khanna	9123456781	varun.khanna@hotelxyz.com	Training Coordinator
	STID24	Tanya Chopra	8901234578	tanya.chopra@hotelxyz.com	Training Coordinator
	STID3	Anil Verma	9123456780	anil.verma@hotelxyz.com	Executive Chef
	STID9	Rajesh Gupta	7012567890	rajesh.gupta@hotelxyz.com	Maintenance Manager

4. Advanced queries, such as subqueries.

1. Retrieve to 5 highest spending guests

```

SELECT Guests.Name AS GuestName, Guests.GuestID,
    (SELECT SUM(
        CASE
            WHEN Bookings.Status = 'Confirmed' THEN Bookings.Price
            WHEN Bookings.Status = 'Cancelled' THEN Bookings.Price * 0.3
            ELSE 0
        END
    )
    FROM Bookings WHERE Bookings.GuestID = Guests.GuestID ) +
    (SELECT SUM(Services.Price) FROM Services WHERE Services.BookingID IN
        (SELECT Bookings.BookingID FROM Bookings
            WHERE Bookings.GuestID = g.GuestID) ) AS TotalSpent
FROM Guests ORDER BY TotalSpent DESC LIMIT 5;

```

	GuestName	GuestID	TotalSpent
►	John	G1	7200.0
	Lisa	G15	7000.0
	Jamie	G2	6750.0
	Louis	G4	6300.0
	Harry	G5	6200.0

2. Which guest has availed most of the services?

SELECT

```

Guests.Name AS GuestName, Guests.GuestID,
    (SELECT COUNT(*) FROM Services WHERE Services.BookingID IN

```

```
(SELECT Bookings.BookingID FROM Bookings WHERE Bookings.GuestID =  
Guests.GuestID) ) AS TotalServices  
FROM Guests ORDER BY TotalServices DESC LIMIT 1;
```

	GuestName	GuestID	TotalServices
▶	John	G1	4