

1. Выбор гостей и их бронирований с общей стоимостью более 1100\$ + сортировка по этой стоимости

```
SELECT first_name, last_name, booking.checkin_date, booking.checkout_date,
SUM(booking.booking_amount) AS total_amount
FROM guest g
JOIN booking ON g.id = booking.guest_id
GROUP BY first_name, last_name, booking.checkin_date, booking.checkout_date
HAVING SUM(booking.booking_amount) > 1100
ORDER BY total_amount DESC;
```

	first_name character varying (128)	last_name character varying (128)	checkin_date date	checkout_date date	total_amount bigint
1	Charlie	Brown	2024-04-25	2024-04-28	2000
2	Alice	Smith	2024-04-10	2024-04-15	1800
3	Emily	Young	2024-04-20	2024-04-25	1600
4	David	Miller	2024-04-28	2024-05-01	1500
5	Charlie	Brown	2024-04-05	2024-04-08	1400
6	David	Miller	2024-04-12	2024-04-14	1200
7	Emily	Young	2024-05-02	2024-05-05	1200

2. Вывести любого гостя с наибольшим числом заказанных допуг

```
SELECT first_name, last_name, (SELECT COUNT(*) FROM booking_addon ba WHERE
ba.booking_id = b.id) AS addon_count FROM guest
JOIN booking b ON guest.id = b.guest_id
ORDER BY addon_count DESC
LIMIT 1;
```

	first_name character varying (128)	last_name character varying (128)	addon_count bigint
1	Alice	Smith	6

3. Вывести самую дорогую допугу и её стоимость

```
SELECT addon_name, price FROM addon
ORDER BY price DESC
LIMIT 1;
```

	addon_name character varying (200)	price integer
1	In-Room Massage	55

4. Вывести сколько номеров находятся в каждом из статусов

```
SELECT status_name, COUNT(room.id) AS num_available_rooms FROM room_status rs
LEFT JOIN room ON rs.id = room.status_id
GROUP BY status_name;
```

	status_name character varying (200)	num_available_rooms bigint
1	Under Maintenance	2
2	Cleaning	0
3	Maintenance	0
4	Occupied	2
5	Available	2
6	Awaiting Repair	2
7	Booked	2
8	Repair	0
9	Awaiting Cleaning	2
10	Ready for Check-In	2
11	Blocked	2
12	Vacant	2
13	Unavailable	0
14	Checked Out	2
15	Reserved	2
16	Out of Service	2
17	Under Inspection	0
18	Cleaning in Progress	2
19	Needs Inspection	2
20	Out of Order	2
21	Ready	0

5. Вывести классы обслуживания и количество фич в каждом классе

```
SELECT class_name, COUNT(r_cf.feature_id) AS num_features
FROM room_class
LEFT JOIN room_class_feature r_cf ON room_class.id = r_cf.room_class_id
GROUP BY room_class.class_name
```

	class_name character varying (100)	num_features bigint
1	Apartment	0
2	Suite	6
3	Deluxe	6
4	Bungalow	6
5	Beach Hut	0
6	Chalet	0
7	Standard	6
8	Penthouse	6
9	Manor	0
10	Cottage	0
11	Loft	0
12	Villa	0
13	Cabin	0
14	Treehouse	0
15	Townhouse	0

6. Вывести отсортированное число номеров в каждом классе

```
SELECT class_name, COUNT(room.id) AS num_rooms
FROM room_class rc
LEFT JOIN room ON rc.id = room.room_class_id
GROUP BY rc.class_name
ORDER BY num_rooms DESC;
```

	class_name character varying (100) 🔒	num_rooms bigint 🔒
1	Deluxe	6
2	Standard	6
3	Penthouse	6
4	Bungalow	6
5	Suite	6
6	Loft	0
7	Villa	0
8	Cabin	0
9	Treehouse	0
10	Apartment	0
11	Townhouse	0
12	Beach Hut	0
13	Chalet	0
14	Manor	0
15	Cottage	0

7. Вывести общую стоимость всех бронирований для каждого гостя

```
SELECT first_name, last_name, SUM(b.booking_amount) AS total_booking_amount
FROM guest
JOIN booking b ON guest.id = b.guest_id
GROUP BY first_name, last_name;
```

	first_name character varying (128) 🔒	last_name character varying (128) 🔒	total_booking_amount bigint 🔒
1	Alice	Smith	2800
2	David	Miller	2700
3	Bob	Johnson	1400
4	Emily	Young	2800
5	Charlie	Brown	3400

8. Выбрать двух гостей с наибольшей общей стоимостью всех бронирований

```
SELECT first_name, last_name, SUM(b.booking_amount) AS total_booking_amount
FROM guest
JOIN booking b ON guest.id = b.guest_id
GROUP BY first_name, last_name
ORDER BY total_booking_amount DESC
LIMIT 2;
```

	first_name character varying (128) 🔒	last_name character varying (128) 🔒	total_booking_amount bigint 🔒
1	Charlie	Brown	3400
2	Alice	Smith	2800

9. Получить среднюю стоимость дополнительных услуг

```
SELECT AVG(price) AS avg_addon_price
FROM addon;
```

	avg_addon_price numeric 🔒
1	24.666666666666667

10. Вывести наименьший и наибольший номер комнат(номера) и их этажи

```
SELECT room_number, floor FROM room
WHERE room_number = (SELECT MIN(room_number) FROM room)
OR room_number = (SELECT MAX(room_number) FROM room);
```

	room_number integer 🔒	floor integer 🔒
1	101	1
2	304	3