Name: Gurdev singh

ld:100376466

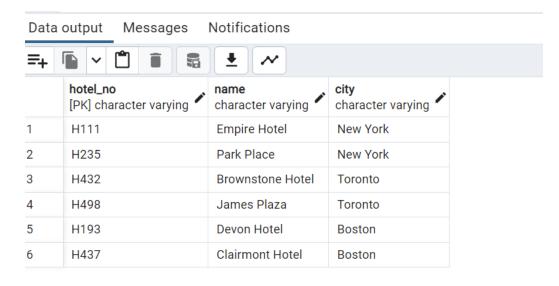
Lab: 5

SQL Queries:

1. List full details of all hotels.

Ans:

SELECT * FROM hotel.



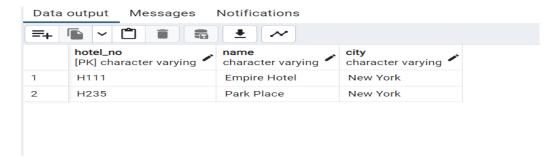
2. List full details of all hotels in New York.

Ans:

SELECT *

FROM hotel

WHERE city = 'New York';



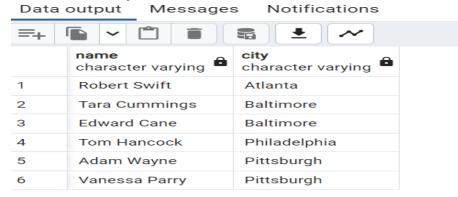
3. List the names and cities of all guests, ordered according to their cities.

Ans:

SELECT name, city

FROM guest

ORDER BY city;



4. List all details for non-smoking rooms in ascending order of price

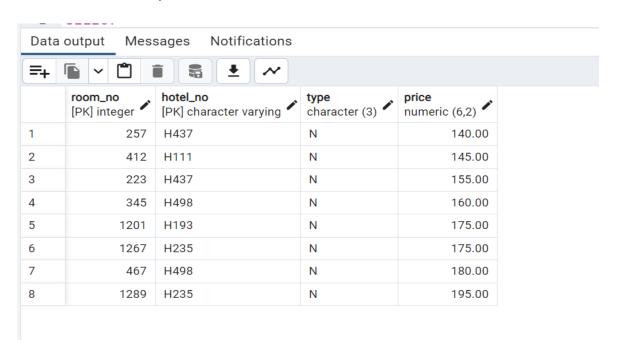
Ans:

SELECT *

FROM room

WHERE type='N'

ORDER BY price;

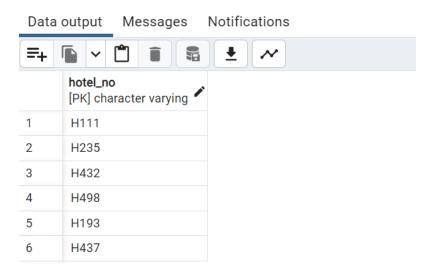


5. List the number of hotels there are.

Ans:

SELECT Hotel_No

FROM hotel;

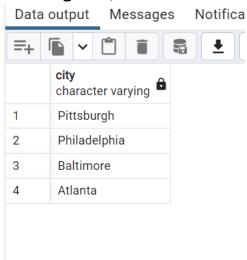


6. List the cities in which guests live. Each city should be listed only once.

Ans:

SELECT DISTINCT(city)

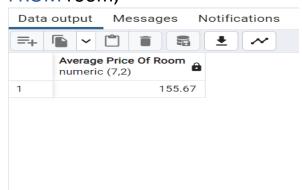
FROM guest;



7. List the average price of a room.

Ans:

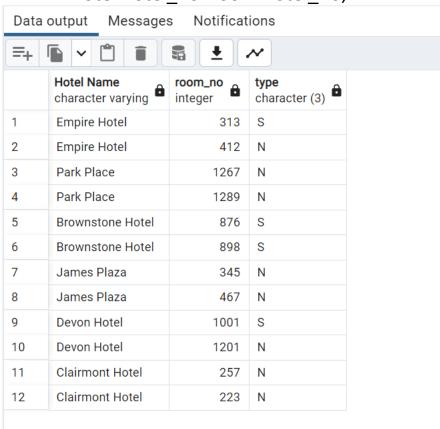
SELECT AVG(price) ::NUMERIC(7,2) AS "Average Price Of Room" FROM room;



8. List hotel names, their room numbers, and the type of that room. Ans:

SELECT name AS "Hotel Name",room_no, type FROM hotel , room

WHERE hotel.hotel_no=room.hotel_no;



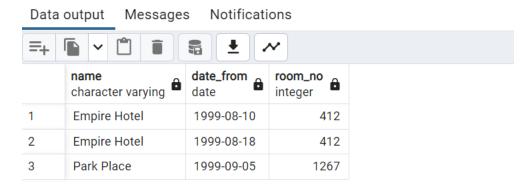
9. List the hotel names, booking dates, and room numbers for all hotels in New York.

Ans:

SELECT name ,date from,room no

FROM booking, hotel

WHERE hotel.hotel_no=booking.hotel_no AND hotel.city='New York'

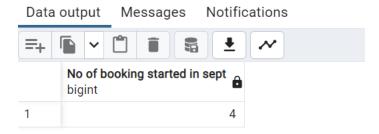


10. What is the number of bookings that started in the month of September?

Ans:

SELECT count(date_from) As "No of booking started in sept" FROM booking

WHERE Extract(Month FROM date_from)=9;



11. List the names and cities of guests who began a stay in New York in August

Ans:

--//I used a subquery:

SELECT name, city

From Guest

WHERE guest No IN(

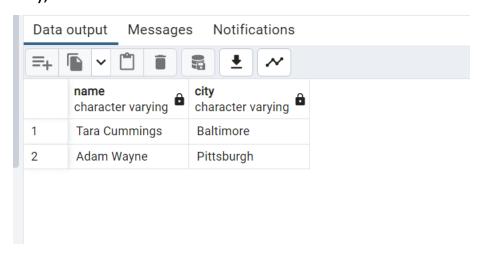
SELECT guest_no

FROM booking ,hotel

WHERE hotel.city='New York' AND Extract(Month FROM booking.date_from)=8 AND

booking.hotel_No=hotel.hotel_no

);



12. List the hotel names and room numbers of any hotel rooms that have not been booked.

Ans:

SELECT name,room_no AS "Room available"

FROM hotel JOIN room

ON hotel.hotel_no=room.hotel_no

WHERE room_no IN(

SELECT room_no

FROM room

EXCEPT

SELECT room_no

FROM booking

)

Data	output Messages	s Notifications
	name character varying	Room available integer
1	Empire Hotel	313
2	Park Place	1289
3	Brownstone Hotel	876
4	Brownstone Hotel	898
5	Clairmont Hotel	257

13. List the hotel name and city of the hotel with the highest priced room.

Ans:

SELECT name, city

FROM hotel JOIN room

ON hotel.hotel_no = room.hotel_no

ORDER BY price DESC

limit 1;

Data output Messages Notifications

The character varying city character varying character varying name city character varying name character varying name city character

14. List hotel names, room numbers, cities, and prices for hotels that have rooms with prices lower than the lowest priced room in a Boston hotel.



Q: 15 List the average price of a room grouped by city Ans:

SELECT city ,Avg(price)::NUMERIC(5,2) AS "Average price"

FROM room JOIN hotel

ON room.hotel_no=hotel.hotel_no

GROUP BY(city)

