

HOTEL RESERVATION ANALYSIS

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INTRODUCTION

- ❖ This project is about analysing a hotel's reservation to find trends and gain insights into the guests preferences for rooms, food and booking mode etc.
- ❖ I have analyzed it from the dataset with 700 reservations for the year 2017 and 2018.
- ❖ I have been given the problem statement with 15 questions to gain insights using MYSQL.

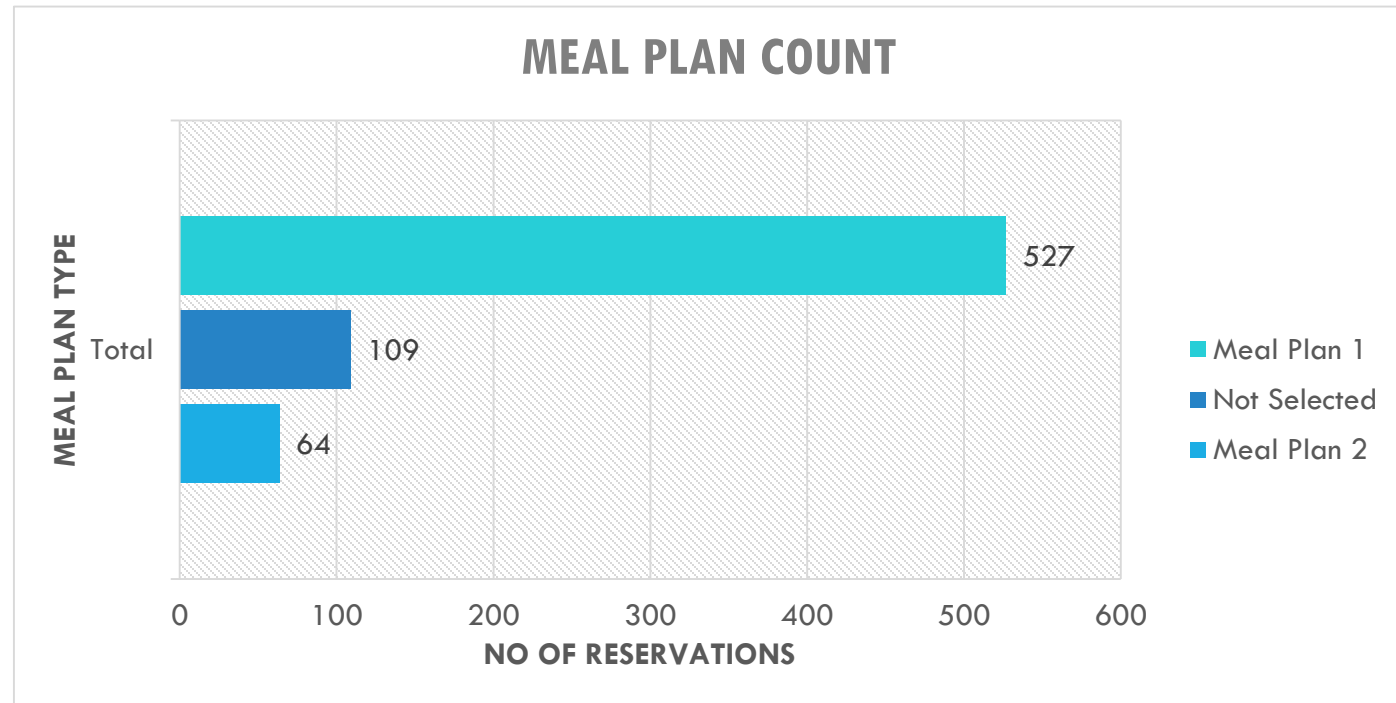
Q1: What is the total number of reservations in the dataset?



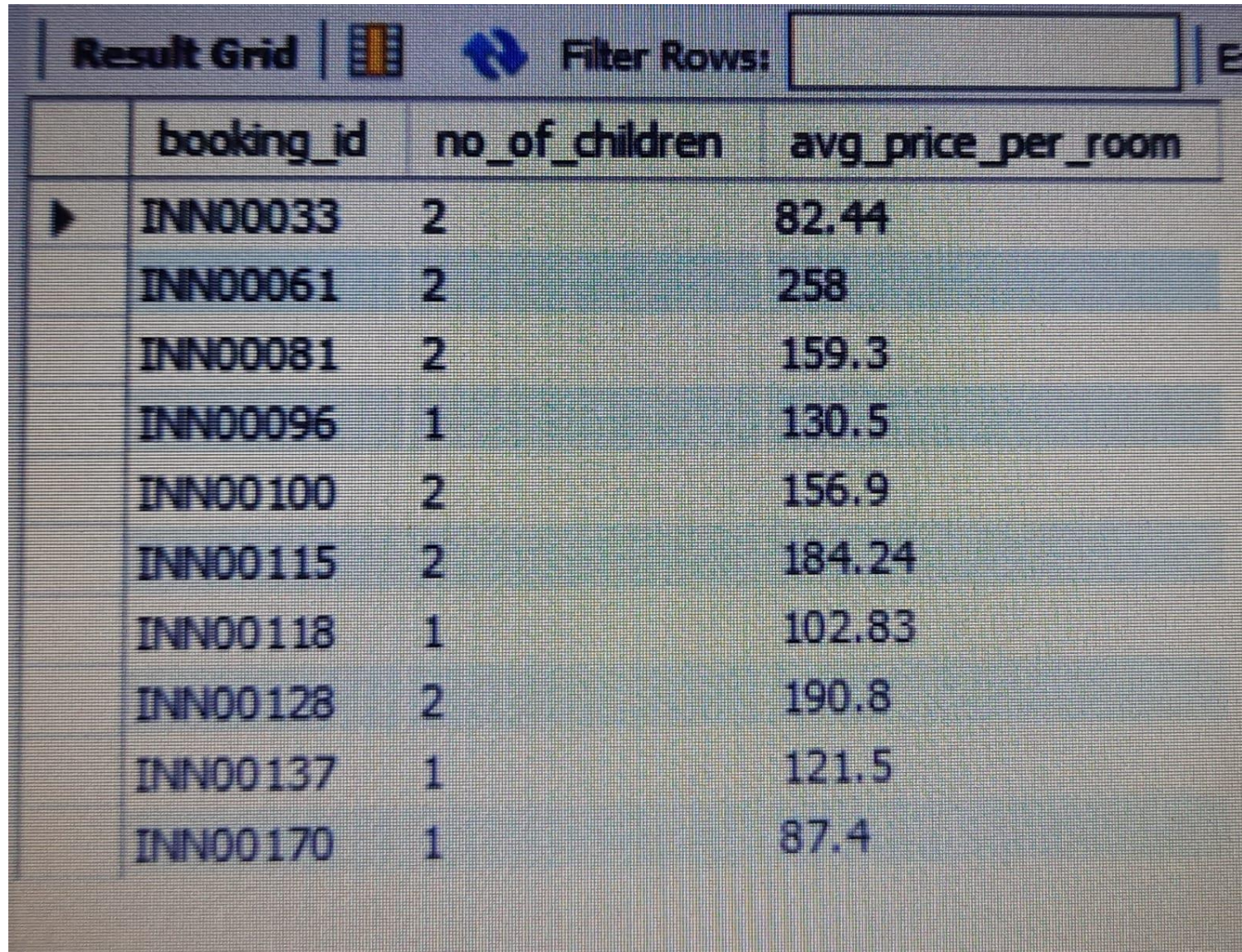
Result Grid		Filter Rows:
	total_number_of_reservations	
▶	700	

Q2: Which meal plan is the most popular among guests?

Result Grid		Filter Rows:	Export:	Wrap Cell
	most_popular_meal_plan	total_guests_selected		
▶	Meal Plan 1	527		



Q3:What is the average price per room for reservations involving children?



The image shows a screenshot of a database query result grid. At the top, there is a header bar with the text "Result Grid" and a "Filter Rows:" button. Below this, the table has three columns: "booking_id", "no_of_children", and "avg_price_per_room". The table contains 10 rows of data, each representing a reservation with children. The first row is highlighted with a blue background. The data is as follows:

booking_id	no_of_children	avg_price_per_room
INN00033	2	82.44
INN00061	2	258
INN00081	2	159.3
INN00096	1	130.5
INN00100	2	156.9
INN00115	2	184.24
INN00118	1	102.83
INN00128	2	190.8
INN00137	1	121.5
INN00170	1	87.4

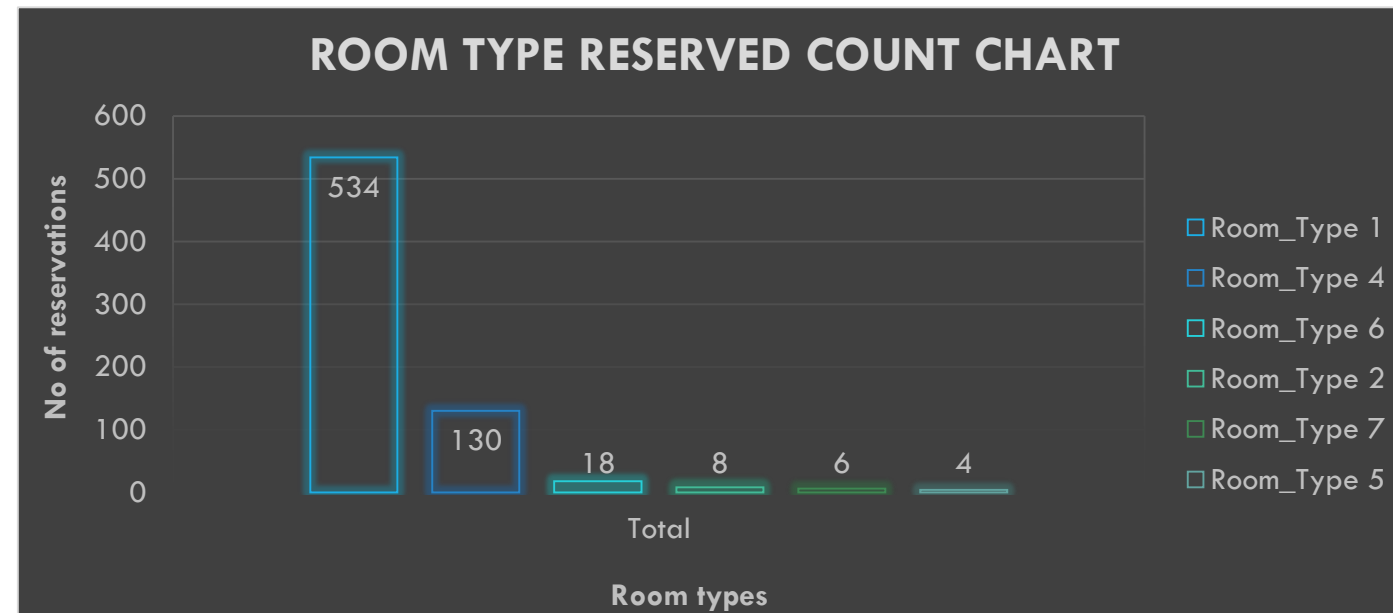
Out of 700 only 48
reservations involved
children

Result Grid			Filter Rows:
	Total_reservations	YEAR	
▶	577	2018	

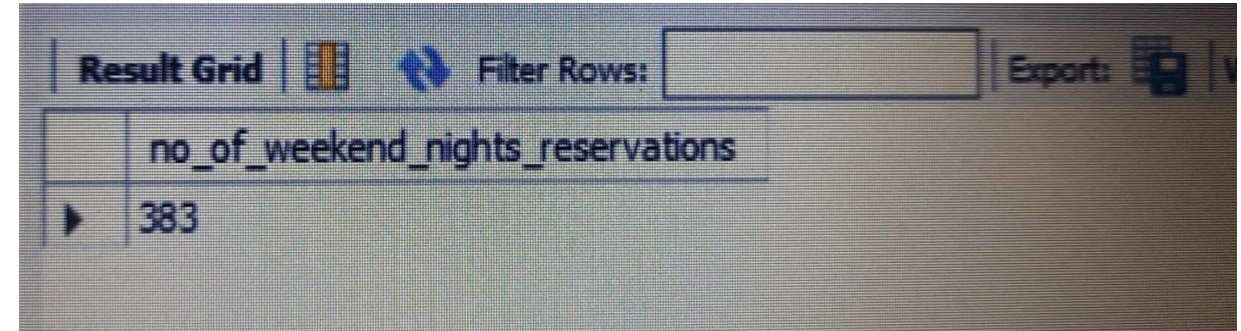
Q4: How many reservations were made for the year 20XX (replace XX with the desired year)?

Q5: What is the most commonly booked room type?

Result Grid			Filter Rows:
	most_booked_room_type	total_no_of_bookings	
▶	Room_Type 1	534	

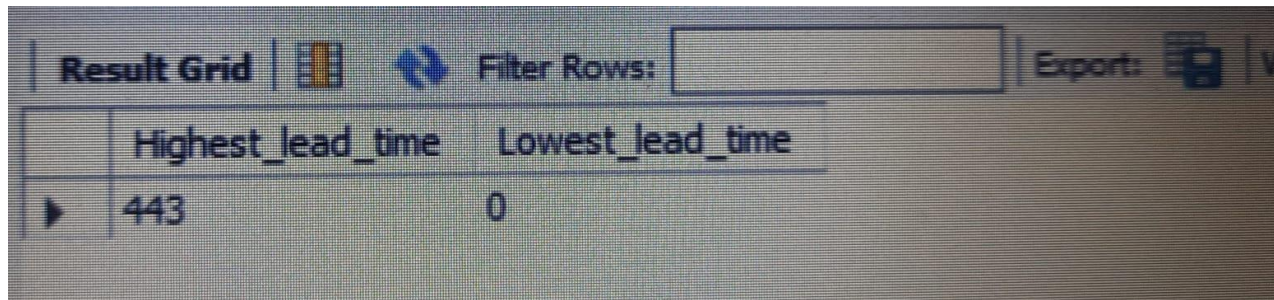


Q6: How many reservations fall on a weekend
(no_of_weekend_nights > 0)?



A screenshot of a SQL query result grid. The header row shows the column name 'no_of_weekend_nights_reservations'. The first data row shows the value '383'. The interface includes a 'Result Grid' tab, a 'Filter Rows' input field, and an 'Export' button.

no_of_weekend_nights_reservations
383



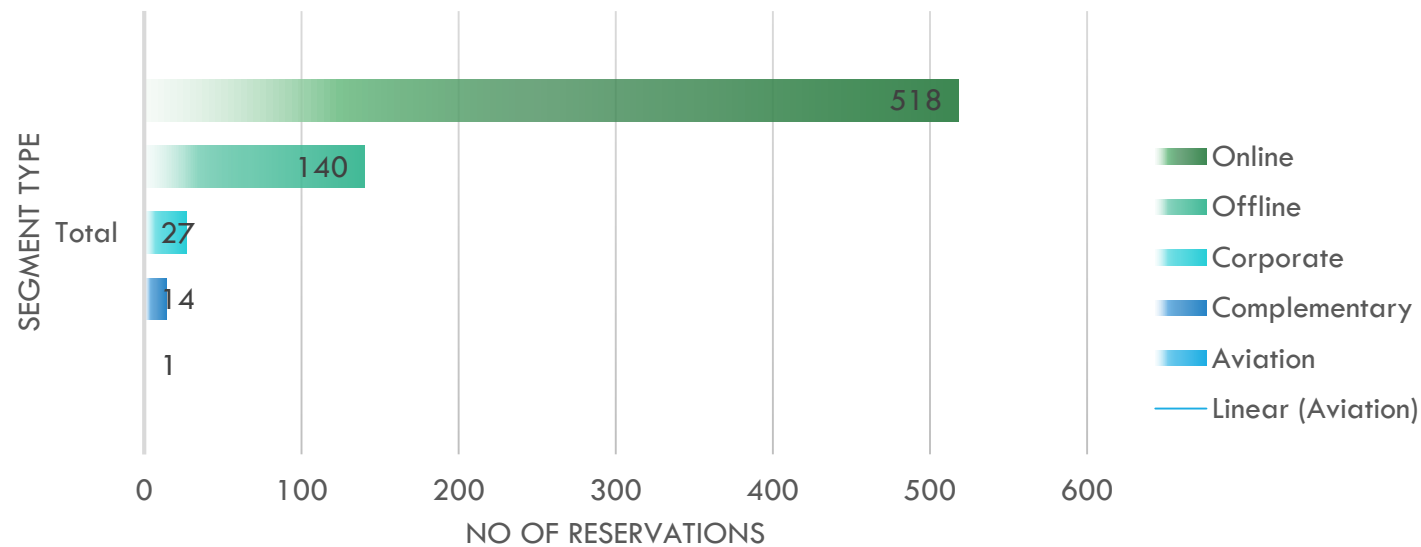
A screenshot of a SQL query result grid. The header row shows two columns: 'Highest_lead_time' and 'Lowest_lead_time'. The first data row shows the values '443' and '0'. The interface includes a 'Result Grid' tab, a 'Filter Rows' input field, and an 'Export' button.

Highest_lead_time	Lowest_lead_time
443	0

Q7: What is the highest and lowest
lead time for reservations?

Q8: What is the most common market segment type for reservations?

MOST USED MARKET SEGMENT TYPE



Result Grid | Filter Rows: | Export

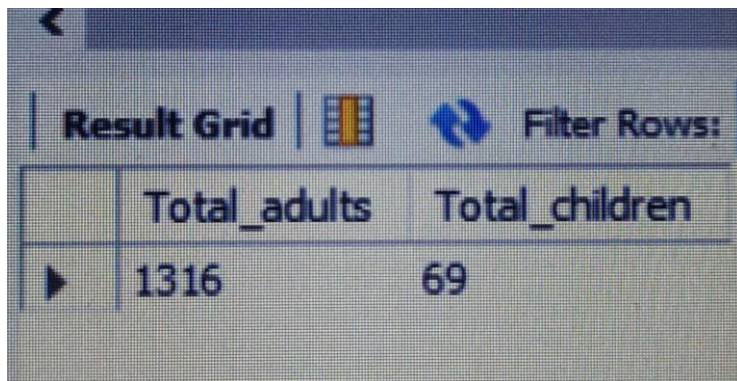
	most_common_segment_type	segment_type_counts
▶	Online	518

Q9: How many reservations have a booking status of "Confirmed"?

Result Grid | Filter Rows:

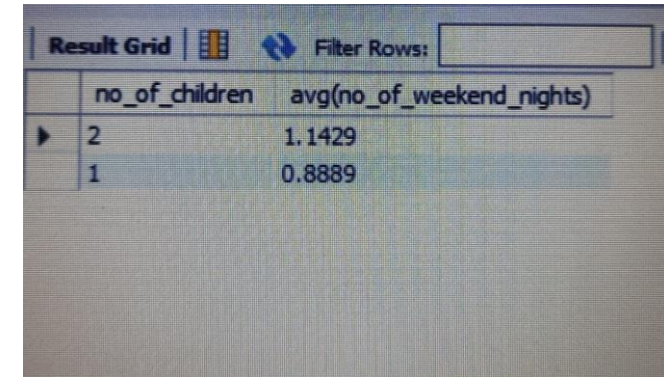
	bookings_with_confirmed
▶	0

Q10. What is the total number of adults and children across all reservations?



A screenshot of a database query result grid. The grid has two columns: 'Total_adults' and 'Total_children'. The first row shows the totals: 1316 for adults and 69 for children. The interface includes a 'Result Grid' header, a 'Filter Rows' button, and a back arrow icon.

	Total_adults	Total_children
▶	1316	69

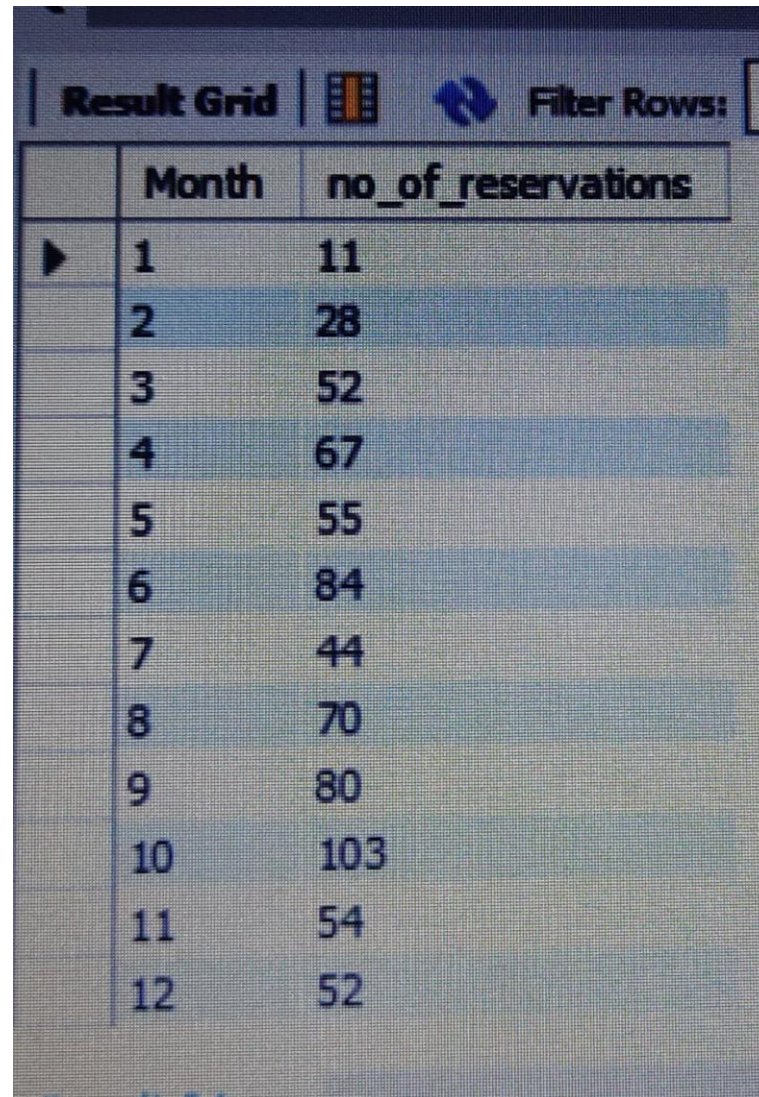


A screenshot of a database query result grid. The grid has two columns: 'no_of_children' and 'avg(no_of_weekend_nights)'. The first row shows an average of 1.1429 for 2 children, and the second row shows an average of 0.8889 for 1 child. The interface includes a 'Result Grid' header, a 'Filter Rows' button, and a back arrow icon.

	no_of_children	avg(no_of_weekend_nights)
▶	2	1.1429
	1	0.8889

Q11. What is the average number of weekend nights for reservations involving children?

Q12. How many reservations were made in each month of the year?



The image shows a screenshot of a software interface with a table titled "Result Grid". The table has two columns: "Month" and "no_of_reservations". The data is as follows:

	Month	no_of_reservations
▶	1	11
	2	28
	3	52
	4	67
	5	55
	6	84
	7	44
	8	70
	9	80
	10	103
	11	54
	12	52

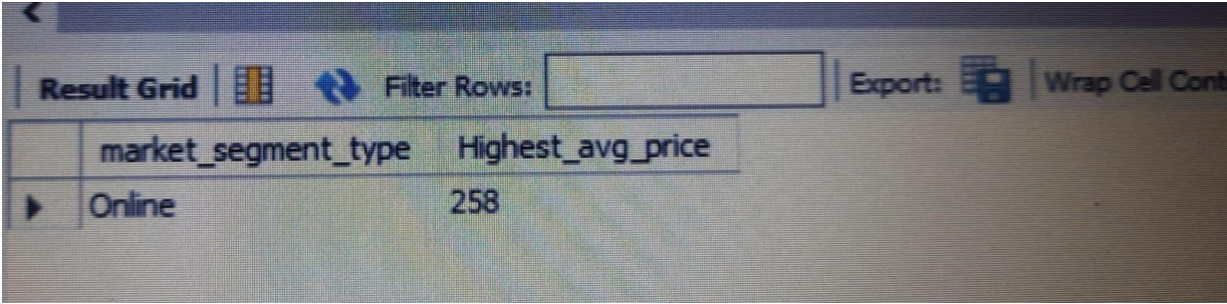
Result Grid Filter Rows: Export: Wrap Cell Contents:			
	room_type_reserved	AVG(no_of_week_nights)	AVG(no_of_weekend_nights)
▶	Room_Type 1	2.0899	0.7884
	Room_Type 4	2.7077	1.0923
	Room_Type 2	2.0000	1.0000
	Room_Type 6	2.5556	1.0556
	Room_Type 5	2.5000	0.0000
	Room_Type 7	1.6667	1.0000

Q13. What is the average number of nights (both weekend and weekday) spent by guests for each room type?

Q14. For reservations involving children, what is the most common room type, and what is the average price for that room type?

Result Grid Filter Rows: Export: Wrap Cell Content: Fetch row			
	most_common_used_room_type	num_of_reservations_with_children	Avg_price_of_room_type
▶	Room_Type 1	24	.123.12291666666665

Q15. Find the market segment type that generates the highest average price per room?



A screenshot of a software interface showing a data grid. The grid has two columns: 'market_segment_type' and 'Highest_avg_price'. The first row shows 'Online' with a value of 258. Above the grid, there are controls for 'Filter Rows' (with a dropdown menu) and 'Export' (with a button icon). The text 'Result Grid' is visible on the left, and 'Wrap Cell Cont' is partially visible on the right.

market_segment_type	Highest_avg_price
Online	258

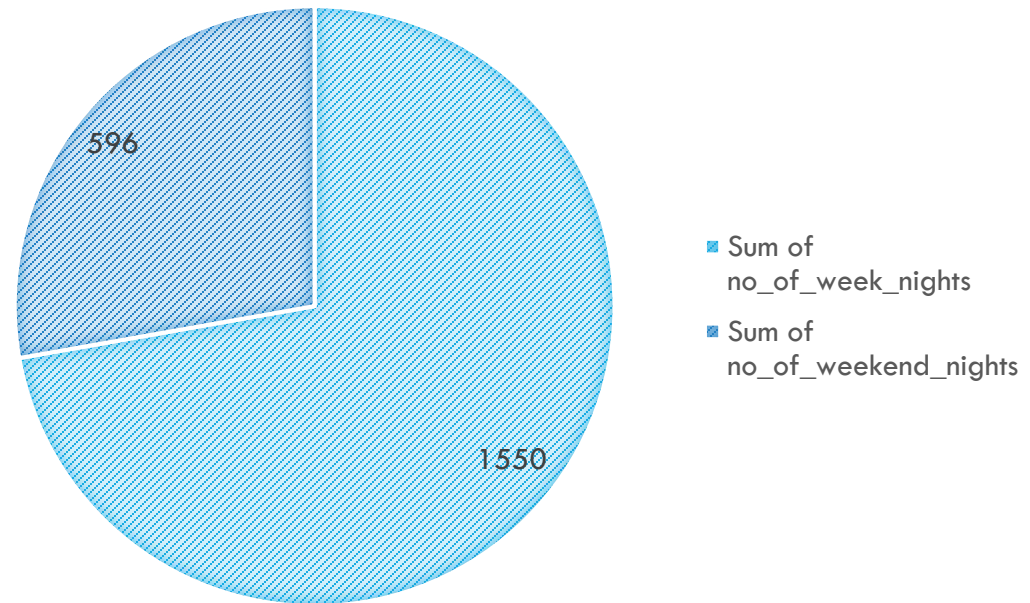
SOME
EXTRA
STUFFS

AVERAGE PRICE OF ROOM TYPES

Room Types	Average Price (ROUNDED)
Room_Type 1	97
Room_Type 2	90
Room_Type 4	123
Room_Type 5	121
Room_Type 6	183
Room_Type 7	169

TOTAL

**MOST
RESERVED TIME**



Out of 700 reservations only 493 bookings were not cancelled. Balance 207 bookings were cancelled by guests.

Booking Status	No of booking status
Cancelled	207
Not Cancelled	493

THANK YOU !!!