**ARINDA HILLARY**

**DBMS**

**LAB 1**

**2/29/2024**

1. [1]**List full details of all hotels.**

SELECT \*

FROM [Hotel]

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1. [1] **List full details of all hotels in Fairfield.**

SELECT \*

FROM [Hotel]

WHERE address LIKE '%Fairfield%'

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1. [1] **List the names and addresses of all guests in Fairfield, alphabetically ordered by name.**

SELECT [guestName],[guestAddress]

FROM [hotelDB].[dbo].[Guest]

WHERE [guestAddress] LIKE '%Fairfield%'

ORDER BY [guestName]

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1. [1] **List all double or family rooms with a price below $400.00 per night, in ascending order of price.**

SELECT \*

FROM [hotelDB].[dbo].[Room]

WHERE [type] IN ('F','D') AND [price] < 400

ORDER BY [price]

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1. [1] **List the bookings for which no dateTo has been specified.**

SELECT \*

FROM [hotelDB].[dbo].[Booking]

WHERE dateTo IS NULL

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1. [1] **How many hotels are there?**

SELECT COUNT( DISTINCT hotelNo)

FROM [hotelDB].[dbo].[Hotel]

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1. [1] **What is the average price of a room across all hotels?**

SELECT AVG(price) AS 'Average Price Per Room'

FROM [hotelDB].[dbo].[Room]

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1. [2] **List the number of rooms in each hotel.**Show hotelNo and hotelName in the result.

SELECT h.hotelNo, h.hotelName, COUNT(r.RoomNo) AS 'Number of rooms'

FROM Room r, Hotel h

WHERE h.hotelNo = r.hotelNo

GROUP BY h.hotelNo, h.hotelName

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1. [2] **What is the amount received per booking night from all booked double rooms across all hotels?**

SELECT SUM(price) AS 'Amount received per booking night'

FROM Room r, Booking b

WHERE type = 'D' AND r.roomNo = b.roomNo

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1. [2] **How many different guests have made bookings for August?**  
   (Hint: you can use function MONTH(DateFrom) which will give you a number for month)

SELECT COUNT(DISTINCT guestNo) 'No. of different guests with August bookings'

FROM Booking

WHERE MONTH(DateFrom) = 8

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1. [2] **What is the total number of bookings for each hotel in September 2023?**  
   Note: You can choose not to display those hotels which do not have a booking in Sept’2023. Alternatively, you can show the number of bookings as 0 (zero) for these hotels.

SELECT h.hotelNo, h.hotelName, COUNT(b.hotelNo) AS ' NO. OF BOOKINGS IN SEP 2023'

FROM Hotel h

LEFT JOIN Booking b

ON h.hotelNo = b.hotelNo AND b.dateFrom BETWEEN '2023-09-01' AND '2023-09-30'

GROUP BY h.hotelNo, h.hotelName

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1. [2]**What is the total number of bookings for each hotel? Display only those hotels for which there are more than 1 bookings.**

SELECT h.hotelNo, h.hotelName, COUNT(b.hotelNo) AS ' NO. OF BOOKINGS'

FROM Hotel h

JOIN Booking b

ON h.hotelNo = b.hotelNo

GROUP BY h.hotelNo, h.hotelName

HAVING COUNT(b.hotelNo) > 1

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1. [3] **List the number of rooms in each hotel in Fairfield.**  **But show only those hotels which has at least 4 rooms.**  Show the hotelName as well.

SELECT h.hotelNo, h.hotelName, COUNT(r.roomNo) AS ' NO. OF ROOMS'

FROM Hotel h, Room r

WHERE h.hotelNo = r.hotelNo AND h.address LIKE '%Fairfield%'

GROUP BY h.hotelNo, h.hotelName

HAVING COUNT(r.roomNo) >= 4

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