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**Task 2**

1. What is the total number of reservations in the dataset?

MariaDB [my\_database]> SELECT COUNT(\*) AS total\_reservations FROM Hotel\_reservation;

+--------------------+

| total\_reservations |

+--------------------+

| 700 |

+--------------------+

1 row in set (0.003 sec)

2. Which meal plan is the most popular among guests?

MariaDB [my\_database]> SELECT type\_of\_meal\_plan, COUNT(\*) AS count

-> FROM Hotel\_reservation

-> GROUP BY type\_of\_meal\_plan

-> ORDER BY count DESC

-> LIMIT 1;

+-------------------+-------+

| type\_of\_meal\_plan | count |

+-------------------+-------+

| Meal Plan 1 | 527 |

+-------------------+-------+

1 row in set (0.004 sec)

3. What is the average price per room for reservations involving children?

MariaDB [my\_database]> SELECT AVG(avg\_price\_per\_room) AS average\_price\_per\_room

-> FROM Hotel\_reservation

-> WHERE no\_of\_child > 0;

+------------------------+

| average\_price\_per\_room |

+------------------------+

| 144.56833333333336 |

+------------------------+

1 row in set (0.002 sec)

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

MariaDB [my\_database]> SELECT COUNT(\*) AS total\_reservations

-> FROM Hotel\_reservation

-> WHERE YEAR(arrival\_date) = 2024;

+--------------------+

| total\_reservations |

+--------------------+

| 0 |

+--------------------+

1 row in set (0.002 sec)

5. What is the most commonly booked room type?

MariaDB [my\_database]> SELECT room\_type\_reserved, COUNT(\*) AS count

-> FROM Hotel\_reservation

-> GROUP BY room\_type\_reserved

-> ORDER BY count DESC

-> LIMIT 1;

+--------------------+-------+

| room\_type\_reserved | count |

+--------------------+-------+

| Room\_Type 1 | 534 |

+--------------------+-------+

1 row in set (0.005 sec)

6. How many reservations fall on a weekend (no\_of\_weekend\_nights > 0)?

MariaDB [my\_database]> SELECT COUNT(\*) AS weekend\_reservations

-> FROM Hotel\_reservation

-> WHERE no\_of\_weekend\_nights > 0;

+----------------------+

| weekend\_reservations |

+----------------------+

| 383 |

+----------------------+

1 row in set (0.001 sec)

7. What is the highest and lowest lead time for reservations?

MariaDB [my\_database]> SELECT

-> MAX(lead\_time) AS highest\_lead\_time,

-> MIN(lead\_time) AS lowest\_lead\_time

-> FROM Hotel\_reservation;

+-------------------+------------------+

| highest\_lead\_time | lowest\_lead\_time |

+-------------------+------------------+

| 443 | 0 |

|  |  |
| --- | --- |
|  |  |

1 row in set (0.001 sec)

8. What is the most common market segment type for reservations?

MariaDB [my\_database]> SELECT market\_segment\_type, COUNT(\*) AS count

-> FROM Hotel\_reservation

-> GROUP BY market\_segment\_type

-> ORDER BY count DESC

-> LIMIT 1;

+---------------------+-------+

| market\_segment\_type | count |

+---------------------+-------+

| Online | 518 |

+---------------------+-------+

1 row in set (0.007 sec)

9. How many reservations have a booking status of "Confirmed"?

MariaDB [my\_database]> SELECT COUNT(\*) AS confirmed\_reservations

-> FROM Hotel\_reservation

-> WHERE booking\_status = 'Confirmed';

+------------------------+

| confirmed\_reservations |

+------------------------+

| 0 |

+------------------------+

1 row in set (0.002 sec)

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

MariaDB [my\_database]> SELECT

-> SUM(no\_of\_adults) AS total\_adults,

-> SUM(no\_of\_child) AS total\_children

-> FROM Hotel\_reservation;

+--------------+----------------+

| total\_adults | total\_children |

+--------------+----------------+

| 1316 | 69 |

+--------------+----------------+

1 row in set (0.002 sec)

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

MariaDB [my\_database]> SELECT AVG(no\_of\_weekend\_nights) AS avg\_weekend\_nights\_with\_children

-> FROM Hotel\_reservation

-> WHERE no\_of\_child > 0;

+----------------------------------+

| avg\_weekend\_nights\_with\_children |

+----------------------------------+

| 1.0000 |

+----------------------------------+

1 row in set (0.002 sec)

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

MariaDB [my\_database]> SELECT

-> MONTH(arrival\_date) AS month,

-> COUNT(\*) AS reservations

-> FROM Hotel\_reservation

-> GROUP BY MONTH(arrival\_date);

+-------+--------------+

| month | reservations |

+-------+--------------+

| 0 | 700 |

+-------+--------------+

1 row in set (0.003 sec)

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

MariaDB [my\_database]> SELECT

-> room\_type\_reserved,

-> AVG(no\_of\_weekend\_nights + no\_of\_week\_nights) AS avg\_total\_nights

-> FROM Hotel\_reservation

-> GROUP BY room\_type\_reserved;

+--------------------+------------------+

| room\_type\_reserved | avg\_total\_nights |

+--------------------+------------------+

| Room\_Type 1 | 2.8783 |

| Room\_Type 2 | 3.0000 |

| Room\_Type 4 | 3.8000 |

| Room\_Type 5 | 2.5000 |

| Room\_Type 6 | 3.6111 |

| Room\_Type 7 | 2.6667 |

+--------------------+------------------+

6 rows in set (0.007 sec)

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

MariaDB [my\_database]> SELECT

-> room\_type\_reserved,

-> COUNT(\*) AS count,

-> AVG(avg\_price\_per\_room) AS avg\_price

-> FROM Hotel\_reservation

-> WHERE no\_of\_child > 0

-> GROUP BY room\_type\_reserved

-> ORDER BY count DESC

-> LIMIT 1;

+--------------------+-------+--------------------+

| room\_type\_reserved | count | avg\_price |

+--------------------+-------+--------------------+

| Room\_Type 1 | 24 | 123.12291666666665 |

+--------------------+-------+--------------------+

1 row in set (0.001 sec)

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

MariaDB [my\_database]> SELECT

-> market\_segment\_type,

-> AVG(avg\_price\_per\_room) AS avg\_price

-> FROM Hotel\_reservation

-> GROUP BY market\_segment\_type

-> ORDER BY avg\_price DESC

-> LIMIT 1;

+---------------------+--------------------+

| market\_segment\_type | avg\_price |

+---------------------+--------------------+

| Online | 112.45521235521232 |

+---------------------+--------------------+

1 row in set (0.005 sec)