

- Sql -

1. CREATE TABLE bookings

```
WITH (  
    format = 'PARQUET',  
    partitioned_by = ARRAY['checkin_date']  
    bucketed_by = ARRAY['room_number'], bucket_count = 10  
) AS  
SELECT  
    room_number,  
    reservation_status,  
    checkin_date,  
    checkout_date,  
    room_type  
FROM (  
    SELECT  
        room_number,  
        reservation_status,  
        checkin_date,  
        checkout_date,  
        room_type,  
        ROW_NUMBER() OVER (PARTITION BY room_number ORDER BY  
checkout_date DESC) AS row_num  
    FROM reservations  
    WHERE reservation_status = 'not_reserved'  
)  
WHERE row_num = 1;
```

2. With sales_cte as (

```
Select format_datetime (month, 'MM) as month,  
Room_type,  
Sum(booking_amount) as total_bookings,  
Avg(booking_amount) as average_bookings  
From bookings  
Group by room_type )
```

```
Select month,
```

```
Room_type,  
Total_bookings,  
Average_bookings,  
Rank() over(partition by month order by total_bookings desc) as rank  
From sales_cte  
Order by month, rank
```