

SQL Case Study

Major Travel Company



Data Dictionary:

Table Name: Users

Column	Data Type	Description
User_id	VARCHAR	User ID
Segment	VARCHAR	User Segment

Table Name: Bookings

Column	Data Type	Description
Booking_id	VARCHAR	Booking ID
Booking_date	DATE	Date of the booking
User_id	VARCHAR	User ID
Line_of_business	VARCHAR	Line of Business (Flight or Hotel)

1. Write a SQL Query that gives the Below Output

Output: Summary at Segment Level

segment	no_of_users	user_who_booked_in_apr2022
s1	3	2
s2	2	2
s3	5	1

2. Write a query to identify users whose first booking was a hotel booking

3. Write a query to calculate the days between first and last booking of each users

4. Write a query to count the number of flight and hotel bookings in each of the user segments of the year 2022

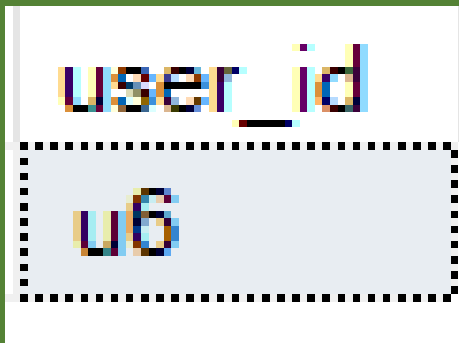
1. Output: Summary at Segment Level

```
SELECT u.segment, count(distinct u.User_id) AS no_of_users,  
count(distinct case when b.Line_of_business = 'Flight' and  
b.Booking_date between '2022-04-01' and '2022-04-30' then  
u.user_id end) AS user_who_booked_in_apr2022  
FROM user_table u LEFT JOIN booking_table b  
ON u.user_id=b.user_id  
GROUP BY u.segment
```

segment	no_of_users	user_who_booked_in_apr2022
s1	3	2
s2	2	2
s3	5	1

2. Write a query to identify users whose first booking was a hotel booking

```
SELECT user_id FROM(SELECT *, rank() over(partition by  
user_id  
ORDER BY booking_date) AS rn  
FROM booking_table) a  
WHERE rn=1 AND Line_of_business='hotel'
```



user_id
u6

3. Write a query to calculate the days between first and last booking of each users

```
SELECT user_id, DATEDIFF(day, min(booking_date),  
max(booking_date)) AS no_of_days  
FROM booking_table  
GROUP BY user_id
```

user_id	no_of_days
u1	44
u2	32
u4	34
u5	14
u6	16

4. Write a query to count the number of flight and hotel bookings in each of the user segments of the year 2022

```
SELECT segment,  
sum(case when line_of_business='flight' then 1 else 0 end) AS  
flight_bookings,  
sum(case when line_of_business='hotel' then 1 else 0 end) AS  
hotel_bookings  
FROM booking_table b join user_table u  
ON b.user_id=u.user_id  
GROUP BY Segment
```

segment	flight_bookings	hotel_bookings
s1	8	4
s2	3	3
s3	1	1

Thank You