Orders Table

order_id	customer_id	region	order_amount	order_date
1	101	North	500	2024-01-10
2	102	South	700	2024-01-12
3	101	North	200	2024-02-05
4	103	East	600	2024-02-10
5	101	North	800	2024-03-01

Customers Table

customer_id	customer_name
101	Alice
102	Bob
103	Charlie

Write an SQL query to find the top customer (based on total order amount) in each region along with their total order value.

Expected Output:		
region	top_customer	total_spent
North	Alice	1500
South	Bob	700
East	Charlie	600

Solution:

```
WITH customer_totals AS (
    SELECT
        o.region,
        o.customer_id,
        SUM(o.order_amount) AS total_spent
    FROM orders o
    GROUP BY o.region, o.customer_id
),
ranked_customers AS (
    SELECT
```

```sql
        ct.region,
        c.customer_name AS top_customer,
        ct.total_spent,
        DENSE_RANK() OVER (PARTITION BY ct.region ORDER BY ct.total_spent DESC) AS rnk
    FROM customer_totals ct
    JOIN customers c ON ct.customer_id = c.customer_id
)
SELECT
    region,
    top_customer,
    total_spent
FROM ranked_customers
WHERE rnk = 1;
```