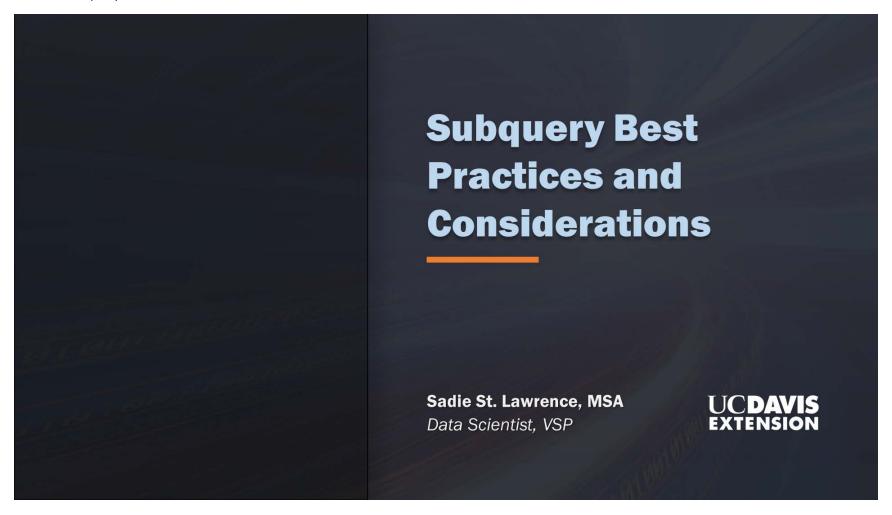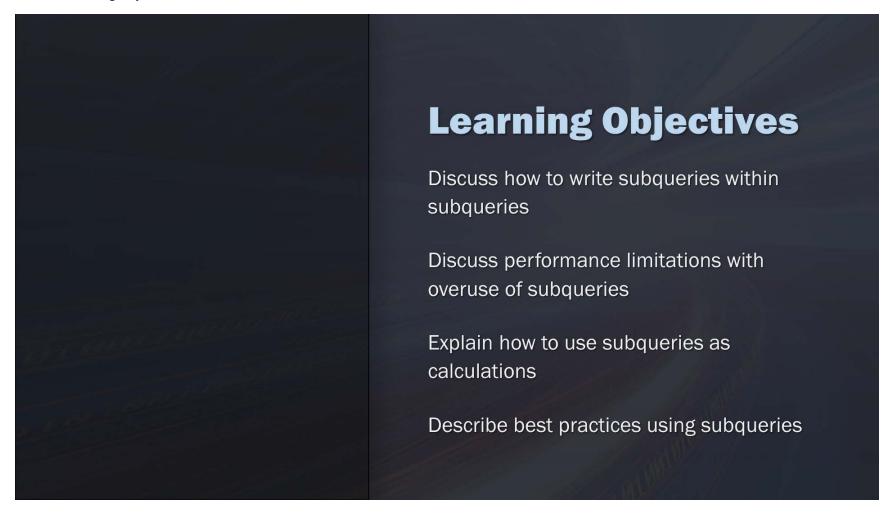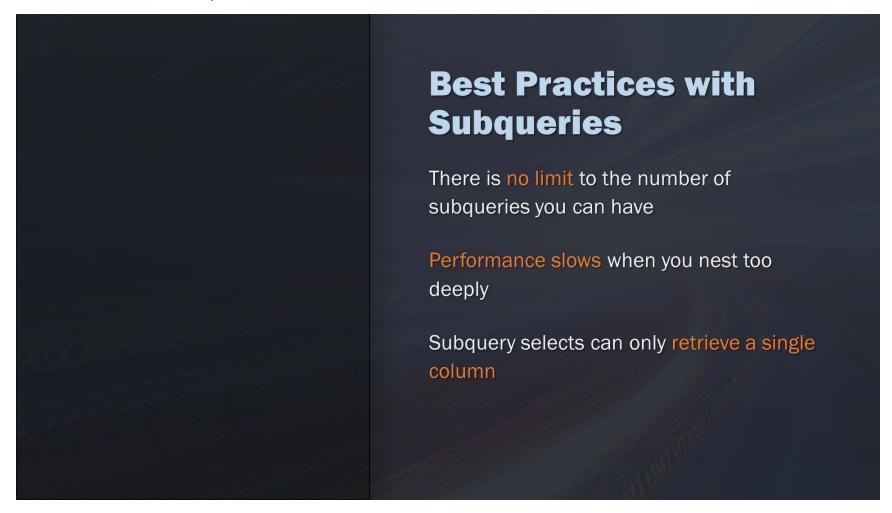Slide 1: Subquery Best Practices and Considerations

Slide 2: Learning Objectives

Slide 3: Best Practices With Subqueries

Best Practices with Subqueries

There is no limit to the number of subqueries you can have

Performance slows when you nest too deeply

Subquery selects can only retrieve a single column

Slide 4: Subquery in Subquery

Subquery in Subquery

1. Order numbers for toothbrushes

2. Customer ID's for those orders

3. Customer information for those orders

```sql
SELECT Customer_name, Customer_contact
FROM Customers
WHERE cust_id IN
    SELECT customer_id
    FROM Orders
    WHERE order_number IN (SELECT order_number
        FROM OrderItems
            WHERE prod_name = 'Toothbrush');
```
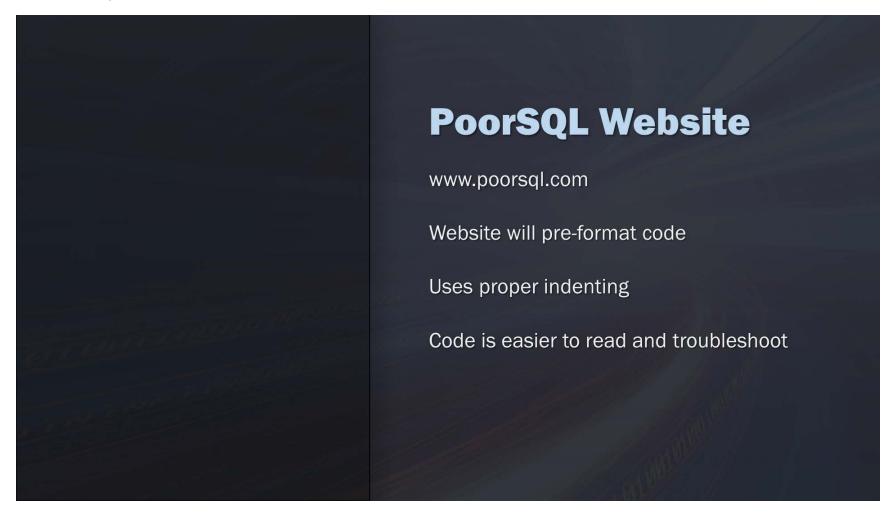
Slide 5: Subquery in Subquery

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Slide 6: Subquery in Subquery

Slide 7: PoorSQL Website

Slide 8: Subqueries for Calculations

Subqueries for Calculations

Total number of orders placed by every customer

Customer_name	Customer_state	Orders
Becky	IA	5
Nita	CA	6
Raj	OH	0
Steve	AZ	1

```
SELECT COUNT (*) AS orders
FROM  Orders
WHERE customer_id = '143569';


SELECT customer_name
    ,customer_state
    (SELECT COUNT (*) AS orders
    FROM  Orders
    WHERE Orders.customer_id =
Customer.customer_id) AS orders
FROM customers
ORDER BY Customer_name
```

Slide 9: The Power of Subqueries