SUBQUERIES

METIS

Subqueries

Item Details Table

item_id	name	department	material	sales_price
1	tiger t-shirt	clothing	cotton blend	9.9900
2	giraffe-print bag	accessories	canvas	49.9900
3	elephant tie	accessories	silk	35.4900
4	zebra-striped pants	clothing	silk	30.9900
5	peacock feather hat	accessories	felt	34.9900
6	leopard-print scarf	accessories	silk	14.4900
8	gazelle lamp	home goods	metal	79.9900
9	bedding set, tiger icons	home goods	cotton blend	69.9900
11	aardvark earrings	accessories	metal	9.9900

Subqueries

Question:
What accessories sell for less than the elephant tie?

Step 1: What is the price of the elephant tie?

```
SELECT sales_price FROM item_details
    WHERE name LIKE '%elephant%';
```

sales_price
35.4900

Subqueries

Question:
What accessories sell for less than the elephant tie?

Step 2: What accessories sell for less than $35.49?

```sql
SELECT name, sales_price FROM item_details
    WHERE department = 'accessories'
    AND sales_price < 35.49;
```

name	sales_price
peacock feather hat	34.9900
leopard-print scarf	14.4900
aardvark earrings	9.9900

Subqueries with SELECT

Question:

What accessories sell for less than the elephant tie?

```sql
SELECT name, sales_price FROM item_details
    WHERE department = 'accessories'
    AND sales_price <
        (SELECT sales_price FROM item_details
         WHERE name LIKE '%elephant%');
```

Subquery: Must be enclosed in parentheses

name	sales_price
peacock feather hat	34.9900
leopard-print scarf	14.4900
aardvark earrings	9.9900

Subqueries

New Shipment Table

id	name	quantity	vendor_unit_price	last_shipment
12	manatee tank top	12	3.5000	2018-03-19
13	mirror with moose handle	0	14.1500	2018-03-19
14	sea lion image blanket	0	19.2400	2018-03-19
15	bow tie, ants marching	5	12.2900	2018-03-19

Subqueries with INSERT INTO

Add items received in new shipment to the inventory table

```
INSERT INTO inventory
    (SELECT *,
        0 AS reorder
        FROM new_shipment WHERE quantity > 0);
```

new_shipment table missing the reorder column; build it on the fly!

subquery used to filter and prep new data

Subqueries with INSERT INTO

Inventory Table

id	name	quantity	vendor_unit_price	last_shipment	reorder
1	tiger t-shirt	10	4.2500	2018-01-22	1
2	giraffe-print bag	18	24.9900	2018-02-26	0
3	elephant tie	15	13.1900	2018-02-26	0
4	zebra-striped pants	7	16.8800	2018-01-08	1
5	peacock feather hat	2	NULL	NULL	0
6	leopard-print scarf	NULL	8.5500	NULL	NULL
7	walrus-shaped pillow	5	12.2500	2018-03-12	0
8	gazelle lamp	3	38.8500	2018-03-12	0
9	bedding set, tiger icons	5	31.9900	2018-03-12	0
10	wooly mammoth curta…	4	29.9900	2018-03-12	0
12	manatee tank top	12	3.5000	2018-03-19	0
15	bow tie, ants marching	5	12.2900	2018-03-19	0