ORDER INTERVALS

APR 2024

String, Aggregate and Join Function

Leetcode

Intermediate

Write a solution to get the names of products that have at least 100 units ordered in February 2020 and their amount.

INPUT FORMAT
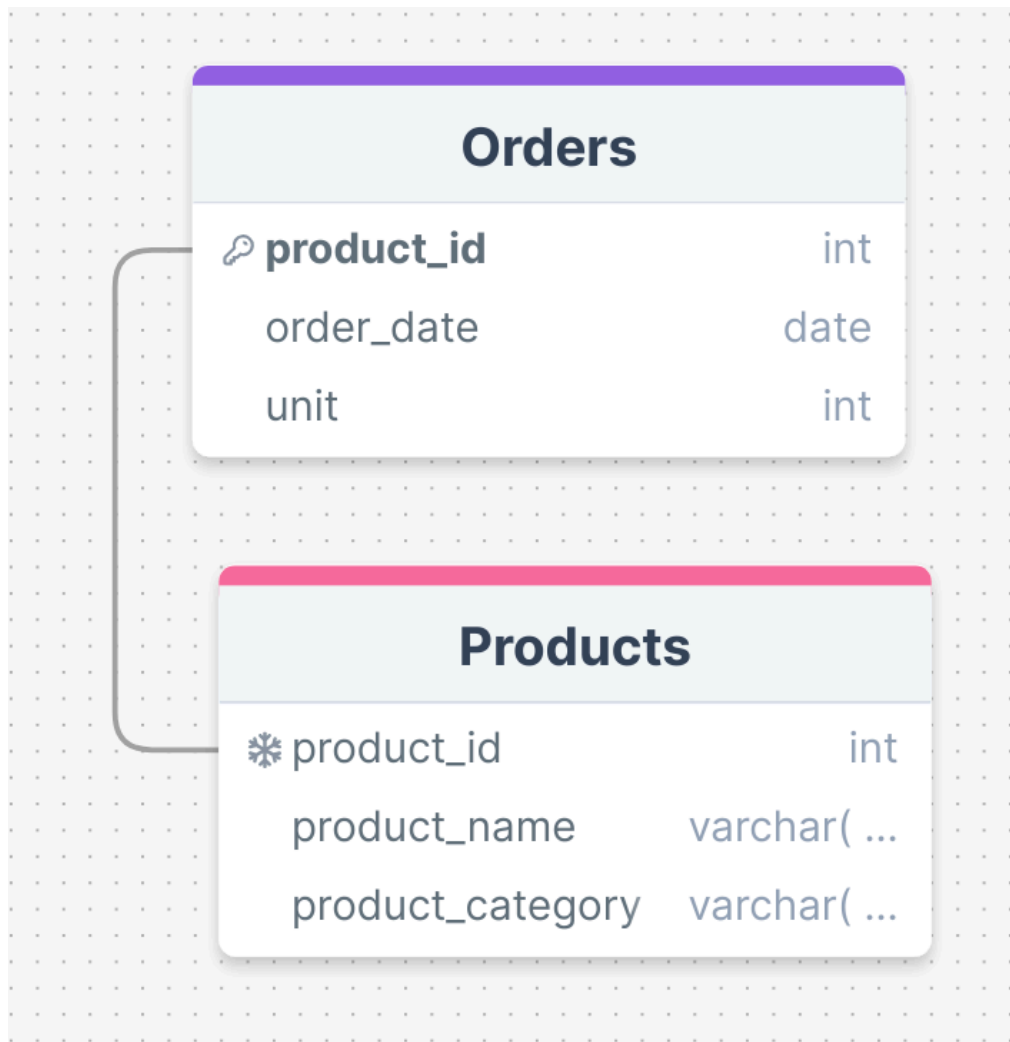
The main source tables are **ORDERS** and **PRODUCTS.**

Table: Products

product_id	product_name	product_category
1	Leetcode Solutions	Book
2	Jewels of Stringology	Book
3	HP	Laptop
4	Lenovo	Laptop
5	Leetcode Kit	T-shirt

Table: Orders

| product_id | order_date | unit |

| ---------- | ---------- | ---- |
1	2020-02-05	60
1	2020-02-10	70
2	2020-01-18	30
2	2020-02-11	80
3	2020-02-17	2
3	2020-02-24	3
4	2020-03-01	20
4	2020-03-04	30
4	2020-03-04	60
5	2020-02-25	50
5	2020-02-27	50
5	2020-03-01	50

CODE SOLUTION

```
SELECT product_name, SUM(unit) AS unit

FROM Products

JOIN Orders ON Products.product_id = Orders.product_id

WHERE EXTRACT(MONTH FROM Orders.order_date) = 2 AND EXTRACT(YEAR FROM
Orders.order_date) = 2020

GROUP BY 1

HAVING SUM(unit) >= 100

ORDER BY 1
```

SOLUTION PROCESS

- Extract and Where function: Using WHERE clause in conjunction with string function extract specified date components to define parameters of select statement
- Aggregate function and clauses: Using SUM in conjuction with grouping by column number to tabulate product totals while using HAVING as substitute for WHERE clause given presence of aggregate in select statement.

OUTPUT

product_name	unit
Leetcode Kit	100
Leetcode Solutions	130