

THABO LATHA

PRACTICAL 2

QUESTION 1

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```
SELECT
  ORDERS.ORDERID AS OrderID,
  ORDERS.ORDERDATE AS OrderDate,
  CUSTOMERS.CUSTOMERNAME AS CustomerName,
  PRODUCT.PRODUCTNAME AS ProductName,
  ORDERS.QUANTITY AS Quantity
FROM"FOOD_DATA1"."PUBLIC"."ORDERS"
INNER JOIN"FOOD_DATA1"."PUBLIC"."CUSTOMERS"
  ON ORDERS.CUSTOMERID = CUSTOMERS.CUSTOMERID
INNER JOIN"FOOD_DATA1"."PUBLIC"."PRODUCT"
  ON ORDERS.PRODUCTID = PRODUCT.PRODUCTID;
```

Results (just now)

TableChart

8,000 rows176ms

#	CUSTOMERID	CUSTOMERNAME	COUNTRY	ORDERID	ORDERDATE
1	1251	Customer_1251	Germany	1	2023-06-10
2	1236	Customer_1236	Australia	2	2023-12-07
3	1170	Customer_1170	Germany	3	2024-10-26
4	1344	Customer_1344	Canada	4	2023-02-17
5	1319	Customer_1319	USA	5	2024-11-06
6	1185	Customer_1185	Australia	6	2024-11-23

QUESTION 2

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--QUESTION 2

SELECT
  CUSTOMERS.CUSTOMERID AS CustomerID,
  CUSTOMERS.CUSTOMERNAME AS CustomerName,
  CUSTOMERS.COUNTRY AS Country,
  ORDERS.ORDERID AS OrderID,
  ORDERS.ORDERDATE AS OrderDate
FROM"FOOD_DATA1"."PUBLIC"."CUSTOMERS"
INNER JOIN"FOOD_DATA1"."PUBLIC"."ORDERS"
  ON CUSTOMERS.CUSTOMERID = ORDERS.CUSTOMERID;
```

Results (just now)

TableChart

8,000 rows45ms

#	CUSTOMERID	CUSTOMERNAME	COUNTRY	ORDERID	ORDERDATE
1	1251	Customer_1251	Germany	1	2023-06-10
2	1236	Customer_1236	Australia	2	2023-12-07
3	1170	Customer_1170	Germany	3	2024-10-26
4	1344	Customer_1344	Canada	4	2023-02-17
5	1319	Customer_1319	USA	5	2024-11-06
6	1185	Customer_1185	Australia	6	2024-11-23

QUESTION 3

```

SELECT
  CUSTOMERS.CUSTOMERID AS CustomerID,
  CUSTOMERS.CUSTOMERNAME AS CustomerName,
  CUSTOMERS.COUNTRY AS Country,
  ORDERS.ORDERID AS OrderID,
  ORDERS.ORDERDATE AS OrderDate,
  ORDERS.PRODUCTID AS ProductID,
  ORDERS.QUANTITY AS Quantity
FROM "FOOD_DATA1"."PUBLIC"."CUSTOMERS"
LEFT JOIN "FOOD_DATA1"."PUBLIC"."ORDERS"
  ON CUSTOMERS.CUSTOMERID = ORDERS.CUSTOMERID;

```

ist now)

Chart 8,000 rows 26ms

CUSTOMERID	CUSTOMERNAME	COUNTRY	ORDERID	ORDERDATE	PRODUCTID	QUANTITY
1251	Customer_1251	Germany	1	2023-06-10	2014	10
1236	Customer_1236	Australia	2	2023-12-07	2004	5
1170	Customer_1170	Germany	3	2024-10-26	2171	9
1344	Customer_1344	Canada	4	2023-02-17	2007	2
1319	Customer_1319	USA	5	2024-11-06	2061	2
1185	Customer_1185	Australia	6	2024-11-23	2190	3

QUESTION 4

```

71 --QUESTION 4
72
73 SELECT
74   PRODUCT.PRODUCTID AS PRODUCTID,
75   PRODUCT.PRODUCTNAME AS PRODUCTNAME,
76   COUNT(ORDERS.ORDERID) AS TOTALORDERS
77 FROM "FOOD_DATA1"."PUBLIC"."PRODUCT"
78 LEFT JOIN "FOOD_DATA1"."PUBLIC"."ORDERS"
79   ON PRODUCT.PRODUCTID = ORDERS.PRODUCTID
80 GROUP BY
81   PRODUCT.PRODUCTID,
82   PRODUCT.PRODUCTNAME;
83

```

Results (just now)

Table Chart 200 rows 33ms

PRODUCTID	PRODUCTNAME	TOTALORDERS
2001	Product_2001	0.5%
2002	Product_2002	0.5%
2003	Product_2003	0.5%
2004	Product_2004	0.5%
2005	Product_2005	0.5%
2006	Product_2006	0.5%
2007	Product_2007	0.5%
2008	Product_2008	0.5%
2009	Product_2009	0.5%
2010	Product_2010	0.5%
2011	Product_2011	0.5%
2012	Product_2012	0.5%
2013	Product_2013	0.5%
2014	Product_2014	0.5%
2015	Product_2015	0.5%
2016	Product_2016	0.5%
2017	Product_2017	0.5%
2018	Product_2018	0.5%
2019	Product_2019	0.5%
2020	Product_2020	0.5%
2021	Product_2021	0.5%
2022	Product_2022	0.5%
2023	Product_2023	0.5%
2024	Product_2024	0.5%
2025	Product_2025	0.5%
2026	Product_2026	0.5%
2027	Product_2027	0.5%
2028	Product_2028	0.5%
2029	Product_2029	0.5%
2030	Product_2030	0.5%
2031	Product_2031	0.5%
2032	Product_2032	0.5%
2033	Product_2033	0.5%
2034	Product_2034	0.5%
2035	Product_2035	0.5%
2036	Product_2036	0.5%
2037	Product_2037	0.5%
2038	Product_2038	0.5%
2039	Product_2039	0.5%
2040	Product_2040	0.5%
2041	Product_2041	0.5%
2042	Product_2042	0.5%
2043	Product_2043	0.5%
2044	Product_2044	0.5%
2045	Product_2045	0.5%
2046	Product_2046	0.5%
2047	Product_2047	0.5%
2048	Product_2048	0.5%
2049	Product_2049	0.5%
2050	Product_2050	0.5%
2051	Product_2051	0.5%
2052	Product_2052	0.5%
2053	Product_2053	0.5%
2054	Product_2054	0.5%
2055	Product_2055	0.5%
2056	Product_2056	0.5%
2057	Product_2057	0.5%
2058	Product_2058	0.5%
2059	Product_2059	0.5%
2060	Product_2060	0.5%
2061	Product_2061	0.5%
2062	Product_2062	0.5%
2063	Product_2063	0.5%
2064	Product_2064	0.5%
2065	Product_2065	0.5%
2066	Product_2066	0.5%
2067	Product_2067	0.5%
2068	Product_2068	0.5%
2069	Product_2069	0.5%
2070	Product_2070	0.5%
2071	Product_2071	0.5%
2072	Product_2072	0.5%
2073	Product_2073	0.5%
2074	Product_2074	0.5%
2075	Product_2075	0.5%
2076	Product_2076	0.5%
2077	Product_2077	0.5%
2078	Product_2078	0.5%
2079	Product_2079	0.5%
2080	Product_2080	0.5%
2081	Product_2081	0.5%
2082	Product_2082	0.5%
2083	Product_2083	0.5%
2084	Product_2084	0.5%
2085	Product_2085	0.5%
2086	Product_2086	0.5%
2087	Product_2087	0.5%
2088	Product_2088	0.5%
2089	Product_2089	0.5%
2090	Product_2090	0.5%
2091	Product_2091	0.5%
2092	Product_2092	0.5%
2093	Product_2093	0.5%
2094	Product_2094	0.5%
2095	Product_2095	0.5%
2096	Product_2096	0.5%
2097	Product_2097	0.5%
2098	Product_2098	0.5%
2099	Product_2099	0.5%
2100	Product_2100	0.5%
2101	Product_2101	0.5%
2102	Product_2102	0.5%
2103	Product_2103	0.5%
2104	Product_2104	0.5%
2105	Product_2105	0.5%
2106	Product_2106	0.5%
2107	Product_2107	0.5%
2108	Product_2108	0.5%
2109	Product_2109	0.5%
2110	Product_2110	0.5%
2111	Product_2111	0.5%
2112	Product_2112	0.5%
2113	Product_2113	0.5%
2114	Product_2114	0.5%
2115	Product_2115	0.5%
2116	Product_2116	0.5%
2117	Product_2117	0.5%
2118	Product_2118	0.5%
2119	Product_2119	0.5%
2120	Product_2120	0.5%
2121	Product_2121	0.5%
2122	Product_2122	0.5%
2123	Product_2123	0.5%
2124	Product_2124	0.5%
2125	Product_2125	0.5%
2126	Product_2126	0.5%
2127	Product_2127	0.5%
2128	Product_2128	0.5%
2129	Product_2129	0.5%
2130	Product_2130	0.5%
2131	Product_2131	0.5%
2132	Product_2132	0.5%
2133	Product_2133	0.5%
2134	Product_2134	0.5%
2135	Product_2135	0.5%
2136	Product_2136	0.5%
2137	Product_2137	0.5%
2138	Product_2138	0.5%
2139	Product_2139	0.5%
2140	Product_2140	0.5%
2141	Product_2141	0.5%
2142	Product_2142	0.5%
2143	Product_2143	0.5%
2144	Product_2144	0.5%
2145	Product_2145	0.5%
2146	Product_2146	0.5%
2147	Product_2147	0.5%
2148	Product_2148	0.5%
2149	Product_2149	0.5%
2150	Product_2150	0.5%
2151	Product_2151	0.5%
2152	Product_2152	0.5%
2153	Product_2153	0.5%
2154	Product_2154	0.5%
2155	Product_2155	0.5%
2156	Product_2156	0.5%
2157	Product_2157	0.5%
2158	Product_2158	0.5%
2159	Product_2159	0.5%
2160	Product_2160	0.5%
2161	Product_2161	0.5%
2162	Product_2162	0.5%
2163	Product_2163	0.5%
2164	Product_2164	0.5%
2165	Product_2165	0.5%
2166	Product_2166	0.5%
2167	Product_2167	0.5%
2168	Product_2168	0.5%
2169	Product_2169	0.5%
2170	Product_2170	0.5%
2171	Product_2171	0.5%
2172	Product_2172	0.5%
2173	Product_2173	0.5%
2174	Product_2174	0.5%
2175	Product_2175	0.5%
2176	Product_2176	0.5%
2177	Product_2177	0.5%
2178	Product_2178	0.5%
2179	Product_2179	0.5%
2180	Product_2180	0.5%
2181	Product_2181	0.5%
2182	Product_2182	0.5%
2183	Product_2183	0.5%
2184	Product_2184	0.5%
2185	Product_2185	0.5%
2186	Product_2186	0.5%
2187	Product_2187	0.5%
2188	Product_2188	0.5%
2189	Product_2189	0.5%
2190	Product_2190	0.5%
2191	Product_2191	0.5%
2192	Product_2192	0.5%
2193	Product_2193	0.5%
2194	Product_2194	0.5%
2195	Product_2195	0.5%
2196	Product_2196	0.5%
2197	Product_2197	0.5%
2198	Product_2198	0.5%
2199	Product_2199	0.5%
2200	Product_2200	0.5%

QUESTION 5

```

84
85 --QUESTION 5
86
87 SELECT
88     ORDERS.ORDERID AS ORDERID,
89     ORDERS.ORDERDATE AS ORDERDATE,
90     PRODUCT.PRODUCTID AS PRODUCTID,
91     PRODUCT.PRODUCTNAME AS PRODUCTNAME,
92     PRODUCT.PRICE AS PRICE,
93     ORDERS.QUANTITY AS QUANTITY
94 FROM "FOOD_DATA1"."PUBLIC"."ORDERS"
95 RIGHT JOIN "FOOD_DATA1"."PUBLIC"."PRODUCT"
96 ON ORDERS.PRODUCTID = PRODUCT.PRODUCTID;

```

Results (3 minutes ago)

Table Chart 8,000 rows 669ms

#	ORDERID	ORDERDATE	PRODUCTID	PRODUCTNAME	PRICE	QUANTITY
1	1	2023-06-10	2014	Product_2014	522	10
2	2	2023-12-07	2004	Product_2004	1996	5
3	3	2024-10-26	2171	Product_2171	76	9
4	4	2023-02-17	2007	Product_2007	156	2
5	5	2024-11-06	2061	Product_2061	1595	2

QUESTION 6

```

100
101 SELECT
102     CUSTOMERS.CUSTOMERID AS CUSTOMERID,
103     CUSTOMERS.CUSTOMERNAME AS CUSTOMERNAME,
104     CUSTOMERS.COUNTRY AS COUNTRY,
105     ORDERS.ORDERID AS ORDERID,
106     ORDERS.ORDERDATE AS ORDERDATE,
107     ORDERS.PRODUCTID AS PRODUCTID,
108     ORDERS.QUANTITY AS QUANTITY,
109 FROM "FOOD_DATA1"."PUBLIC"."ORDERS"
110 RIGHT JOIN "FOOD_DATA1"."PUBLIC"."CUSTOMERS"
111 ON ORDERS.CUSTOMERID = CUSTOMERS.CUSTOMERID;

```

Results (just now)

Table Chart 8,000 rows 582ms

#	CUSTOMERID	CUSTOMERNAME	COUNTRY	ORDERID	ORDERDATE	PRODUCTID	QUANTITY
1	1251	Customer_1251	Germany	1	2023-06-10	2014	10
2	1236	Customer_1236	Australia	2	2023-12-07	2004	5
3	1170	Customer_1170	Germany	3	2024-10-26	2171	9
4	1344	Customer_1344	Canada	4	2023-02-17	2007	2
5	1319	Customer_1319	USA	5	2024-11-06	2061	2
6	1185	Customer_1185	Australia	6	2024-11-23	2190	3
7	1011	Customer_1011	Germany	7	2023-07-29	2099	8
8	1322	Customer_1322	Australia	8	2023-12-06	2078	7
9	1224	Customer_1224	Australia	9	2025-01-25	2043	7

QUESTION 7

```

112 --QUESTION 7
113
114 SELECT
115     CUSTOMERS.CUSTOMERID AS CUSTOMERID,
116     CUSTOMERS.CUSTOMERNAME AS CUSTOMERNAME,
117     CUSTOMERS.COUNTRY AS COUNTRY,
118     ORDERS.ORDERID AS ORDERID,
119     ORDERS.ORDERDATE AS ORDERDATE,
120     ORDERS.PRODUCTID AS PRODUCTID,
121     ORDERS.QUANTITY AS QUANTITY,
122     FROM "FOOD_DATA1"."PUBLIC"."ORDERS"
123     FULL OUTER JOIN "FOOD_DATA1"."PUBLIC"."CUSTOMERS"
124     ON ORDERS.CUSTOMERID = CUSTOMERS.CUSTOMERID;

```

Results (just now)

Table

Chart

🔍

📄

8,000 rows

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24ms

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🗂️	#	CUSTOMERID	A	CUSTOMERNAME	A	COUNTRY	#	ORDERID	📅	ORDERDATE	#	PRODUCTID	#	QUANTITY
1		1251		Customer_1251		Germany		1		2023-06-10		2014		10
2		1236		Customer_1236		Australia		2		2023-12-07		2004		5
3		1170		Customer_1170		Germany		3		2024-10-26		2171		9
4		1344		Customer_1344		Canada		4		2023-02-17		2007		2
5		1319		Customer_1319		USA		5		2024-11-06		2061		2
6		1185		Customer_1185		Australia		6		2024-11-23		2190		3
7		1011		Customer_1011		Germany		7		2023-07-29		2099		8
8		1322		Customer_1322		Australia		8		2023-12-06		2078		7

QUESTION 8

```

120 -----
121
122 --QUESTION 8
123
124 SELECT
125     product.productid AS productid,
126     product.productname AS productname,
127     product.price AS price,
128     orders.orderid AS orderid,
129     orders.orderdate AS orderdate,
130     orders.customerid AS customerid,
131     orders.quantity AS quantity
132 FROM "FOOD_DATA1"."PUBLIC"."PRODUCT" AS product
133 FULL OUTER JOIN "FOOD_DATA1"."PUBLIC"."ORDERS" AS orders
134     ON product.productid = orders.productid;
135
136
137
138
139
140

```

Results (just now)

TableChart

8,000 rows631ms

	#	PRODUCTID	PRODUCTNAME	#	PRICE	#	ORDERID	ORDERDATE	#	CUSTOMERID	#	QUANTITY
1		2014	Product_2014		522	1	2023-06-10		1251		10	
2		2004	Product_2004		1996	2	2023-12-07		1236		5	
3		2171	Product_2171		76	3	2024-10-26		1170		9	

SELECT

```
ORDERS.ORDERID AS OrderID,  
ORDERS.ORDERDATE AS OrderDate,  
CUSTOMERS.CUSTOMERNAME AS CustomerName,  
PRODUCT.PRODUCTNAME AS ProductName,  
ORDERS.QUANTITY AS Quantity
```

FROM"FOOD_DATA1"."PUBLIC"."ORDERS"

```
INNER JOIN "FOOD_DATA1"."PUBLIC"."CUSTOMERS"  
    ON ORDERS.CUSTOMERID = CUSTOMERS.CUSTOMERID  
INNER JOIN "FOOD_DATA1"."PUBLIC"."PRODUCT"  
    ON ORDERS.PRODUCTID = PRODUCT.PRODUCTID;
```

--QUESTION 2

```
SELECT  
    CUSTOMERS.CUSTOMERID AS CustomerID,  
    CUSTOMERS.CUSTOMERNAME AS CustomerName,  
    CUSTOMERS.COUNTRY AS Country,  
    ORDERS.ORDERID AS OrderID,  
    ORDERS.ORDERDATE AS OrderDate  
FROM "FOOD_DATA1"."PUBLIC"."CUSTOMERS"  
INNER JOIN "FOOD_DATA1"."PUBLIC"."ORDERS"  
    ON CUSTOMERS.CUSTOMERID = ORDERS.CUSTOMERID;
```

--QUESTION 3

```
SELECT  
    CUSTOMERS.CUSTOMERID AS CustomerID,  
    CUSTOMERS.CUSTOMERNAME AS CustomerName,  
    CUSTOMERS.COUNTRY AS Country,  
    ORDERS.ORDERID AS OrderID,  
    ORDERS.ORDERDATE AS OrderDate,
```

```
ORDERS.PRODUCTID AS ProductID,  
ORDERS.QUANTITY AS Quantity  
FROM "FOOD_DATA1"."PUBLIC"."CUSTOMERS"  
LEFT JOIN "FOOD_DATA1"."PUBLIC"."ORDERS"  
ON CUSTOMERS.CUSTOMERID = ORDERS.CUSTOMERID;
```

--QUESTION 4

```
SELECT  
PRODUCT.PRODUCTID AS PRODUCTID,  
PRODUCT.PRODUCTNAME AS PRODUCTNAME,  
COUNT(ORDERS.ORDERID) AS TOTALORDERS  
FROM "FOOD_DATA1"."PUBLIC"."PRODUCT"  
LEFT JOIN "FOOD_DATA1"."PUBLIC"."ORDERS"  
ON PRODUCT.PRODUCTID = ORDERS.PRODUCTID  
GROUP BY  
PRODUCT.PRODUCTID,  
PRODUCT.PRODUCTNAME;
```

--QUESTION 5

```
SELECT  
ORDERS.ORDERID AS ORDERID,  
ORDERS.ORDERDATE AS ORDERDATE,  
PRODUCT.PRODUCTID AS PRODUCTID,  
PRODUCT.PRODUCTNAME AS PRODUCTNAME,  
PRODUCT.PRICE AS PRICE,  
ORDERS.QUANTITY AS QUANTITY
```

```
FROM"FOOD_DATA1"."PUBLIC"."ORDERS"  
RIGHT JOIN"FOOD_DATA1"."PUBLIC"."PRODUCT"  
ON ORDERS.PRODUCTID = PRODUCT.PRODUCTID;
```

-- QUESTION 6

```
SELECT  
CUSTOMERS.CUSTOMERID AS CUSTOMERID,  
CUSTOMERS.CUSTOMERNAME AS CUSTOMERNAME,  
CUSTOMERS.COUNTRY AS COUNTRY,  
ORDERS.ORDERID AS ORDERID,  
ORDERS.ORDERDATE AS ORDERDATE,  
ORDERS.PRODUCTID AS PRODUCTID,  
ORDERS.QUANTITY AS QUANTITY,  
FROM"FOOD_DATA1"."PUBLIC"."ORDERS"  
RIGHT JOIN "FOOD_DATA1"."PUBLIC"."CUSTOMERS"  
ON ORDERS.CUSTOMERID = CUSTOMERS.CUSTOMERID;
```

--QUESTION 7

```
SELECT  
CUSTOMERS.CUSTOMERID AS CUSTOMERID,  
CUSTOMERS.CUSTOMERNAME AS CUSTOMERNAME,  
CUSTOMERS.COUNTRY AS COUNTRY,  
ORDERS.ORDERID AS ORDERID,  
ORDERS.ORDERDATE AS ORDERDATE,  
ORDERS.PRODUCTID AS PRODUCTID,  
ORDERS.QUANTITY AS QUANTITY,  
FROM"FOOD_DATA1"."PUBLIC"."ORDERS"
```

```
FULL OUTER JOIN "FOOD_DATA1"."PUBLIC"."CUSTOMERS"  
ON ORDERS.CUSTOMERID = CUSTOMERS.CUSTOMERID;
```

--QUESTION 8

SELECT

```
    product.productid AS productid,  
    product.productname AS productname,  
    product.price AS price,  
    orders.orderid AS orderid,  
    orders.orderdate AS orderdate,  
    orders.customerid AS customerid,  
    orders.quantity AS quantity
```

FROM "FOOD_DATA1"."PUBLIC"."PRODUCT" AS product

FULL OUTER JOIN "FOOD_DATA1"."PUBLIC"."ORDERS" AS orders

```
    ON product.productid = orders.productid;
```