

PRACTICAL EXERCISE 2

RESULTS

1. INNER JOIN: Orders with Customer and Product Names

```
34
35 --1. INNER JOIN: Orders with Customer and Product Names
36
37 SELECT
38     o.orderid,
39     o.orderdate,
40     c.customername,
41     p.productname,
42     o.quantity
43 FROM ORDERS.PRACTICAL.ORDERS AS o
44 INNER JOIN CUSTOMERS.PRACTICAL.CUSTOMERS AS c ON c.customerid = o.customerid
45 INNER JOIN PRODUCTS.PRACTICAL.PRODUCTS AS p ON p.productid = o.productid;
46
47
```

| # | ORDERID | ORDERDATE | CUSTOMERNAME | PRODUCTNAME | QUANTITY |
|---|---------|------------|---------------|--------------|----------|
| 1 | 1 | 2023-06-10 | Customer_1251 | Product_2014 | 10 |
| 2 | 2 | 2023-12-07 | Customer_1236 | Product_2004 | 5 |
| 3 | 3 | 2024-10-26 | Customer_1170 | Product_2171 | 9 |
| 4 | 4 | 2023-02-17 | Customer_1344 | Product_2007 | 2 |
| 5 | 5 | 2024-11-06 | Customer_1319 | Product_2061 | 2 |
| 6 | 6 | 2024-11-23 | Customer_1185 | Product_2190 | 3 |
| 7 | 7 | 2023-07-29 | Customer_1011 | Product_2099 | 8 |
| 8 | 8 | 2023-12-06 | Customer_1322 | Product_2078 | 7 |
| 9 | 9 | 2025-01-25 | Customer_1224 | Product_2043 | 7 |

Query History

2. INNER JOIN: Customers Who Placed Orders

```
47
48 --2. INNER JOIN: Customers Who Placed Orders
49
50 SELECT
51     c.customerid,
52     c.customername,
53     c.country,
54     o.orderid,
55     o.orderdate
56 FROM CUSTOMERS.PRACTICAL.CUSTOMERS AS c
57 INNER JOIN ORDERS.PRACTICAL.ORDERS AS o ON c.customerid = o.customerid
58 WHERE quantity >=1;
59
60
```

| # | 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 |
| 7 | 1011 | Customer_1011 | Germany | 7 | 2023-07-29 |
| 8 | 1322 | Customer_1322 | Australia | 8 | 2023-12-06 |
| 9 | 1224 | Customer_1224 | Australia | 9 | 2025-01-25 |

Query History

3. LEFT JOIN: All Customers and Their Orders

```
60
61 --3. LEFT JOIN: All Customers and Their Orders
62
63 SELECT
64     c.customerid,
65     c.customername,
66     c.country,
67     o.orderid,
68     o.orderdate,
69     p.productid,
70     o.quantity
71 FROM CUSTOMERS.PRACTICAL.CUSTOMERS AS c
72 LEFT JOIN ORDERS.PRACTICAL.ORDERS AS o ON c.customerid = o.customerid
73 LEFT JOIN PRODUCTS.PRACTICAL.PRODUCTS AS p ON o.productid = p.productid;
74
```

Results (just now) Download results

Table Chart 4,000 rows 60ms

| # | 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 |

4. LEFT JOIN: Product Order Count

```
76 --4. LEFT JOIN: Product Order Count
77
78 SELECT
79     p.productid,
80     p.productname,
81     COUNT(o.productid) AS totalorders
82 FROM PRODUCTS.PRACTICAL.PRODUCTS AS p
83 LEFT JOIN ORDERS.PRACTICAL.ORDERS AS o ON p.productid = o.productid
84 GROUP BY ALL;
85
86
87 -- 5. RIGHT JOIN: Orders with Product Info (Include Products Not Ordered)
88 -- Question: Find all orders along with product details, including any products that might not have been ordered.
89
90 SELECT
91     o.orderid,
92     o.orderdate,
93     p.productid,
```

Results (just now) 200 rows 33ms

Table Chart

| # | PRODUCTID | PRODUCTNAME | TOTALORDERS |
|-----|-----------|--------------|-------------|
| 1 | 2001 | Product_2001 | 7 |
| 2 | 2002 | Product_2002 | 7 |
| 3 | 2003 | Product_2003 | 7 |
| 4 | 2004 | Product_2004 | 7 |
| 5 | 2005 | Product_2005 | 7 |
| 6 | 2006 | Product_2006 | 7 |
| 7 | 2007 | Product_2007 | 7 |
| 8 | 2008 | Product_2008 | 7 |
| 9 | 2009 | Product_2009 | 7 |
| 10 | 2010 | Product_2010 | 7 |
| 11 | 2011 | Product_2011 | 7 |
| 12 | 2012 | Product_2012 | 7 |
| 13 | 2013 | Product_2013 | 7 |
| 14 | 2014 | Product_2014 | 7 |
| 15 | 2015 | Product_2015 | 7 |
| 16 | 2016 | Product_2016 | 7 |
| 17 | 2017 | Product_2017 | 7 |
| 18 | 2018 | Product_2018 | 7 |
| 19 | 2019 | Product_2019 | 7 |
| 20 | 2020 | Product_2020 | 7 |
| 21 | 2021 | Product_2021 | 7 |
| 22 | 2022 | Product_2022 | 7 |
| 23 | 2023 | Product_2023 | 7 |
| 24 | 2024 | Product_2024 | 7 |
| 25 | 2025 | Product_2025 | 7 |
| 26 | 2026 | Product_2026 | 7 |
| 27 | 2027 | Product_2027 | 7 |
| 28 | 2028 | Product_2028 | 7 |
| 29 | 2029 | Product_2029 | 7 |
| 30 | 2030 | Product_2030 | 7 |
| 31 | 2031 | Product_2031 | 7 |
| 32 | 2032 | Product_2032 | 7 |
| 33 | 2033 | Product_2033 | 7 |
| 34 | 2034 | Product_2034 | 7 |
| 35 | 2035 | Product_2035 | 7 |
| 36 | 2036 | Product_2036 | 7 |
| 37 | 2037 | Product_2037 | 7 |
| 38 | 2038 | Product_2038 | 7 |
| 39 | 2039 | Product_2039 | 7 |
| 40 | 2040 | Product_2040 | 7 |
| 41 | 2041 | Product_2041 | 7 |
| 42 | 2042 | Product_2042 | 7 |
| 43 | 2043 | Product_2043 | 7 |
| 44 | 2044 | Product_2044 | 7 |
| 45 | 2045 | Product_2045 | 7 |
| 46 | 2046 | Product_2046 | 7 |
| 47 | 2047 | Product_2047 | 7 |
| 48 | 2048 | Product_2048 | 7 |
| 49 | 2049 | Product_2049 | 7 |
| 50 | 2050 | Product_2050 | 7 |
| 51 | 2051 | Product_2051 | 7 |
| 52 | 2052 | Product_2052 | 7 |
| 53 | 2053 | Product_2053 | 7 |
| 54 | 2054 | Product_2054 | 7 |
| 55 | 2055 | Product_2055 | 7 |
| 56 | 2056 | Product_2056 | 7 |
| 57 | 2057 | Product_2057 | 7 |
| 58 | 2058 | Product_2058 | 7 |
| 59 | 2059 | Product_2059 | 7 |
| 60 | 2060 | Product_2060 | 7 |
| 61 | 2061 | Product_2061 | 7 |
| 62 | 2062 | Product_2062 | 7 |
| 63 | 2063 | Product_2063 | 7 |
| 64 | 2064 | Product_2064 | 7 |
| 65 | 2065 | Product_2065 | 7 |
| 66 | 2066 | Product_2066 | 7 |
| 67 | 2067 | Product_2067 | 7 |
| 68 | 2068 | Product_2068 | 7 |
| 69 | 2069 | Product_2069 | 7 |
| 70 | 2070 | Product_2070 | 7 |
| 71 | 2071 | Product_2071 | 7 |
| 72 | 2072 | Product_2072 | 7 |
| 73 | 2073 | Product_2073 | 7 |
| 74 | 2074 | Product_2074 | 7 |
| 75 | 2075 | Product_2075 | 7 |
| 76 | 2076 | Product_2076 | 7 |
| 77 | 2077 | Product_2077 | 7 |
| 78 | 2078 | Product_2078 | 7 |
| 79 | 2079 | Product_2079 | 7 |
| 80 | 2080 | Product_2080 | 7 |
| 81 | 2081 | Product_2081 | 7 |
| 82 | 2082 | Product_2082 | 7 |
| 83 | 2083 | Product_2083 | 7 |
| 84 | 2084 | Product_2084 | 7 |
| 85 | 2085 | Product_2085 | 7 |
| 86 | 2086 | Product_2086 | 7 |
| 87 | 2087 | Product_2087 | 7 |
| 88 | 2088 | Product_2088 | 7 |
| 89 | 2089 | Product_2089 | 7 |
| 90 | 2090 | Product_2090 | 7 |
| 91 | 2091 | Product_2091 | 7 |
| 92 | 2092 | Product_2092 | 7 |
| 93 | 2093 | Product_2093 | 7 |
| 94 | 2094 | Product_2094 | 7 |
| 95 | 2095 | Product_2095 | 7 |
| 96 | 2096 | Product_2096 | 7 |
| 97 | 2097 | Product_2097 | 7 |
| 98 | 2098 | Product_2098 | 7 |
| 99 | 2099 | Product_2099 | 7 |
| 100 | 2100 | Product_2100 | 7 |
| 101 | 2101 | Product_2101 | 7 |
| 102 | 2102 | Product_2102 | 7 |
| 103 | 2103 | Product_2103 | 7 |
| 104 | 2104 | Product_2104 | 7 |
| 105 | 2105 | Product_2105 | 7 |
| 106 | 2106 | Product_2106 | 7 |
| 107 | 2107 | Product_2107 | 7 |
| 108 | 2108 | Product_2108 | 7 |
| 109 | 2109 | Product_2109 | 7 |
| 110 | 2110 | Product_2110 | 7 |
| 111 | 2111 | Product_2111 | 7 |
| 112 | 2112 | Product_2112 | 7 |
| 113 | 2113 | Product_2113 | 7 |
| 114 | 2114 | Product_2114 | 7 |
| 115 | 2115 | Product_2115 | 7 |
| 116 | 2116 | Product_2116 | 7 |
| 117 | 2117 | Product_2117 | 7 |
| 118 | 2118 | Product_2118 | 7 |
| 119 | 2119 | Product_2119 | 7 |
| 120 | 2120 | Product_2120 | 7 |
| 121 | 2121 | Product_2121 | 7 |
| 122 | 2122 | Product_2122 | 7 |
| 123 | 2123 | Product_2123 | 7 |
| 124 | 2124 | Product_2124 | 7 |
| 125 | 2125 | Product_2125 | 7 |
| 126 | 2126 | Product_2126 | 7 |
| 127 | 2127 | Product_2127 | 7 |
| 128 | 2128 | Product_2128 | 7 |
| 129 | 2129 | Product_2129 | 7 |
| 130 | 2130 | Product_2130 | 7 |
| 131 | 2131 | Product_2131 | 7 |
| 132 | 2132 | Product_2132 | 7 |
| 133 | 2133 | Product_2133 | 7 |
| 134 | 2134 | Product_2134 | 7 |
| 135 | 2135 | Product_2135 | 7 |
| 136 | 2136 | Product_2136 | 7 |
| 137 | 2137 | Product_2137 | 7 |
| 138 | 2138 | Product_2138 | 7 |
| 139 | 2139 | Product_2139 | 7 |
| 140 | 2140 | Product_2140 | 7 |
| 141 | 2141 | Product_2141 | 7 |
| 142 | 2142 | Product_2142 | 7 |
| 143 | 2143 | Product_2143 | 7 |
| 144 | 2144 | Product_2144 | 7 |
| 145 | 2145 | Product_2145 | 7 |
| 146 | 2146 | Product_2146 | 7 |
| 147 | 2147 | Product_2147 | 7 |
| 148 | 2148 | Product_2148 | 7 |
| 149 | 2149 | Product_2149 | 7 |
| 150 | 2150 | Product_2150 | 7 |
| 151 | 2151 | Product_2151 | 7 |
| 152 | 2152 | Product_2152 | 7 |
| 153 | 2153 | Product_2153 | 7 |
| 154 | 2154 | Product_2154 | 7 |
| 155 | 2155 | Product_2155 | 7 |
| 156 | 2156 | Product_2156 | 7 |
| 157 | 2157 | Product_2157 | 7 |
| 158 | 2158 | Product_2158 | 7 |
| 159 | 2159 | Product_2159 | 7 |
| 160 | 2160 | Product_2160 | 7 |
| 161 | 2161 | Product_2161 | 7 |
| 162 | 2162 | Product_2162 | 7 |
| 163 | 2163 | Product_2163 | 7 |
| 164 | 2164 | Product_2164 | 7 |
| 165 | 2165 | Product_2165 | 7 |
| 166 | 2166 | Product_2166 | 7 |
| 167 | 2167 | Product_2167 | 7 |
| 168 | 2168 | Product_2168 | 7 |
| 169 | 2169 | Product_2169 | 7 |
| 170 | 2170 | Product_2170 | 7 |
| 171 | 2171 | Product_2171 | 7 |
| 172 | 2172 | Product_2172 | 7 |
| 173 | 2173 | Product_2173 | 7 |
| 174 | 2174 | Product_2174 | 7 |
| 175 | 2175 | Product_2175 | 7 |
| 176 | 2176 | Product_2176 | 7 |
| 177 | 2177 | Product_2177 | 7 |
| 178 | 2178 | Product_2178 | 7 |
| 179 | 2179 | Product_2179 | 7 |
| 180 | 2180 | Product_2180 | 7 |
| 181 | 2181 | Product_2181 | 7 |
| 182 | 2182 | Product_2182 | 7 |
| 183 | 2183 | Product_2183 | 7 |
| 184 | 2184 | Product_2184 | 7 |
| 185 | 2185 | Product_2185 | 7 |
| 186 | 2186 | Product_2186 | 7 |
| 187 | 2187 | Product_2187 | 7 |
| 188 | 2188 | Product_2188 | 7 |
| 189 | 2189 | Product_2189 | 7 |
| 190 | 2190 | Product_2190 | 7 |
| 191 | 2191 | Product_2191 | 7 |
| 192 | 2192 | Product_2192 | 7 |
| 193 | 2193 | Product_2193 | 7 |
| 194 | 2194 | Product_2194 | 7 |
| 195 | 2195 | Product_2195 | 7 |
| 196 | 2196 | Product_2196 | 7 |
| 197 | 2197 | Product_2197 | 7 |
| 198 | 2198 | Product_2198 | 7 |
| 199 | 2199 | Product_2199 | 7 |
| 200 | 2200 | Product_2200 | 7 |

Query History

5. RIGHT JOIN: Orders with Product Info (Include Products Not Ordered)

```
86
87 -- 5. RIGHT JOIN: Orders with Product Info (Include Products Not Ordered)
88 -- Question: Find all orders along with product details, including any products that might not have been ordered.
89
90 SELECT
91     o.orderid,
92     o.orderdate,
93     p.productid,
94     p.productname,
95     p.price,
96     o.quantity
97 FROM PRODUCTS.PRACTICAL.PRODUCTS AS p
98 RIGHT JOIN ORDERS.PRACTICAL.ORDERS AS o ON p.productid = o.productid;
99
```

Results (just now)

Table Chart 4,000 rows 45ms

| # | 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 |
| 6 | 6 | 2024-11-22 | 2100 | Product_2100 | 1755 | 2 |

Query History

6. RIGHT JOIN: Customer Info with Orders (Include All Customers)

```
101
102 -- 6. RIGHT JOIN: Customer Info with Orders (Include All Customers)
103 -- Question: Which customers have made orders, and include customers even if they have never placed an order.
104
105 SELECT
106     c.customerid,
107     c.customername,
108     c.country,
109     o.orderid,
110     o.orderdate,
111     o.productid,
112     o.quantity
113 FROM CUSTOMERS.PRACTICAL.CUSTOMERS AS c
114 RIGHT JOIN ORDERS.PRACTICAL.ORDERS AS o ON c.customerid = o.customerid;
115
```

Results (just now)

Table Chart 4,000 rows 34ms

| # | 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 | 2024-11-22 | 2100 | 2 |

Query History

7. FULL OUTER JOIN: All Customers and All Orders

118 -- 7. FULL OUTER JOIN: All Customers and All Orders
119 -- Question: List all customers and orders, showing NULLs where customers have not ordered or where orders have no customer info.
120
121 SELECT
122 c.customerid,
123 c.customername,
124 c.country,
125 o.orderid,
126 o.orderdate,
127 o.productid,
128 o.quantity
129 FROM CUSTOMERS.PRACTICAL.CUSTOMERS AS c
130 FULL OUTER JOIN ORDERS.PRACTICAL.ORDERS AS o ON c.customerid = o.customerid;
131

Results (just now)

TableChart

4,000 rows36ms

| # | 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 | 1196 | Customer_1196 | Australia | 6 | 2024-11-22 | 2100 | 2 |

Query History

8. FULL OUTER JOIN: All Products and Orders

134 -- 8. FULL OUTER JOIN: All Products and Orders
135 -- Question: List all products and orders, showing NULLs where products were never ordered or orders are missing product info.
136
137 SELECT
138 p.productid,
139 p.productname,
140 p.price,
141 o.orderid,
142 o.orderdate,
143 o.customerid,
144 o.quantity
145 FROM PRODUCTS.PRACTICAL.PRODUCTS AS p
146 FULL OUTER JOIN ORDERS.PRACTICAL.ORDERS AS o ON p.productid = o.productid;
147

Results (1 minute ago)

TableChart

4,000 rows169ms

| # | 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 |
| 4 | 2007 | Product_2007 | 156 | 4 | 2023-02-17 | 1344 | 2 |
| 5 | 2061 | Product_2061 | 1595 | 5 | 2024-11-06 | 1319 | 2 |
| 6 | 2100 | Product_2100 | 1755 | 6 | 2024-11-22 | 1196 | 2 |

Query History