Database Schema Documentation

Core Tables

Products

Central table storing product information

- ProductID (Primary Key)
- Name Product name
- Price Product price
- StockQuantity Available inventory
- CategoryID (Foreign Key) References Categories table

Categories

Product categorization

- CategoryID (Primary Key)
- CategoryName Name of product category

Customers

Customer information storage

- CustomerID (Primary Key)
- Name Customer name
- Email Customer email address

Transaction Tables

Orders

Main order records

- OrderID (Primary Key)
- CustomerID (Foreign Key) References Customers table
- OrderDate Date of order placement

OrderDetails

Itemized order information

- DetailID (Primary Key)
- OrderID (Foreign Key) References Orders table
- ProductID (Foreign Key) References Products table
- Quantity Number of items ordered

Supporting Tables

Reviews

Product review system

- ReviewID (Primary Key)
- ProductID (Foreign Key) References Products table
- CustomerID (Foreign Key) References Customers table
- Rating Numerical rating
- Comment Text review

Shipping

Delivery tracking information

- ShippingID (Primary Key)
- OrderID (Foreign Key) References Orders table
- ShipDate Date order shipped
- DeliveryDate Expected/actual delivery date

Discounts

Product-specific discounts

- DiscountID (Primary Key)
 - ProductID (Foreign Key) References Products table
 - DiscountAmount Discount value

E-Commerce Analysis

1. Total number of products in each category:

```
-- 1. Total number of products in each category
748
        SELECT c.CategoryName, COUNT(p.ProductID) AS TotalProducts
749 🖾
        FROM Categories c
750
        LEFT JOIN Products p ON c.CategoryID = p.CategoryID
751
        GROUP BY c.CategoryName;
752
                                         Export: Wrap Cell Content: TA
CategoryName
                     TotalProducts
                     4
  Electronics
                     3
  Clothing
  Home & Kitchen
                     3
  Books
                     4
  Beauty & Personal Care
                    3
  Sports & Outdoors
                     3
```

2. Total sales amount for each product:

```
754
          -- 2. Total sales amount for each product
755 •
         SELECT p.Name, SUM(od.Quantity * p.Price) AS TotalSales
         FROM OrderDetails od
756
          JOIN Products p ON od.ProductID = p.ProductID
757
          GROUP BY p.Name;
758
                                             Export: Wrap Cell Content: 1A
Name
                      TotalSales
   Smartphone
                      520000.00
   Laptop
                      900000.00
   Wireless Headphones 78000.00
   Men's T-Shirt
                      7787.00
   Women's Dress
                      28578.00
   Jeans
                      38974.00
                      16182.00
   Cooking Pan
                      67473.00
   Blender
   Dish Soap
                      1188.00
                      9576.00
   Fiction Novel
   Cookbook
                      12475.00
   Self-Help Book
                      5681.00
   Face Wash
                      6279.00
                      11980.00
   Shampoo
                      7689.00
   Moisturizer
   Tennis Racket
                      27489.00
   Yoga Mat
                      19980.00
   Dumbbells
                      47976.00
Result 91 ×
```

3. Average rating of each product:

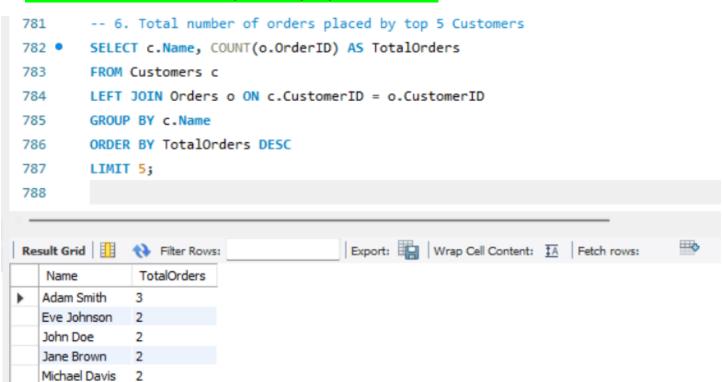
```
-- 3. Average rating of each product
         SELECT p.Name, AVG(r.Rating) AS AverageRating
762
         FROM Products p
         LEFT JOIN Reviews r ON p.ProductID = r.ProductID
763
         GROUP BY p.Name;
764
765
                                           Export: Wrap Cell Content: IA
AverageRating
                     3.2857
  Smartphone
                     3.1429
  Laptop
  Wireless Headphones
                     3.8571
  Men's T-Shirt
                     4.1429
  Women's Dress
                     2,4286
  Jeans
                     4.0000
  Cooking Pan
                     3.5714
  Blender
                     3.7143
  Dish Soap
                     2.8571
  Fiction Novel
                     4.1429
  Cookbook
                     3.7143
  Self-Help Book
                     2.7143
  Face Wash
                     4.0000
                     2.3333
  Shampoo
  Moisturizer
                     4.6667
  Tennis Racket
                     2.1667
                     3.6667
   Yoga Mat
  Dumbbells
                     3.8333
```

4. Top 5 customers by total spending

```
766
         -- 4.Top 5 customers by total spending
         SELECT c.Name, SUM(od.Quantity * p.Price) AS TotalSpent
767 •
         FROM Customers c
768
         JOIN Orders o ON c.CustomerID = o.CustomerID
769
         JOIN OrderDetails od ON o.OrderID = od.OrderID
771
         JOIN Products p ON od.ProductID = p.ProductID
772
         GROUP BY c.Name
773
         ORDER BY TotalSpent DESC
774
         LIMIT 5;
                                           Export: Wrap Cell Content: TA Fetch rows:
Result Grid
              Filter Rows:
                 TotalSpent
  Joseph Martin
                200299.00
  Adam Smith
                190598.00
  Joshua Baker
                150000.00
  Daniel Martinez 101596.00
  Emily Garcia
                100099.00
```

5. the total revenue generated from all orders

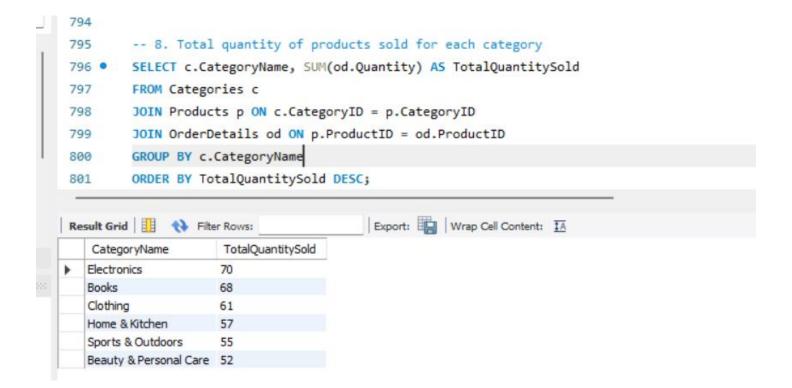
6. Total number of orders placed by top 5 Customers



7. Products with discounts greater than 200

```
-- 7. Products with discounts greater than 200
789
         SELECT p.Name, d.DiscountAmount
790 •
791
         FROM Products p
         JOIN Discounts d ON p.ProductID = d.ProductID
792
793
         WHERE d.DiscountAmount > 200;
Result Grid
                                           Export: Wrap Cell Content: IA
              Filter Rows:
   Name
                DiscountAmount
  Smartphone
                1500.00
  Laptop
               5000.00
  Blender
               250.00
  Tennis Racket
               300.00
```

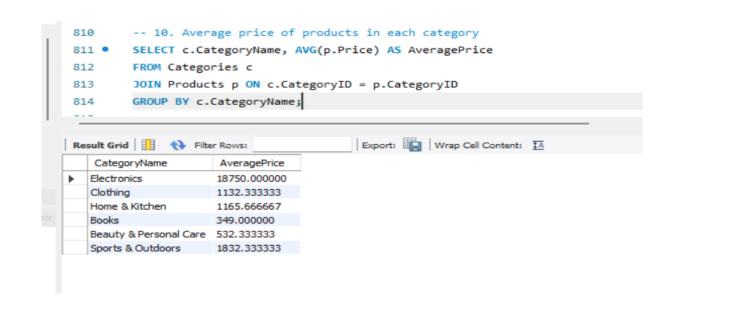
8. Total quantity of products sold for each category



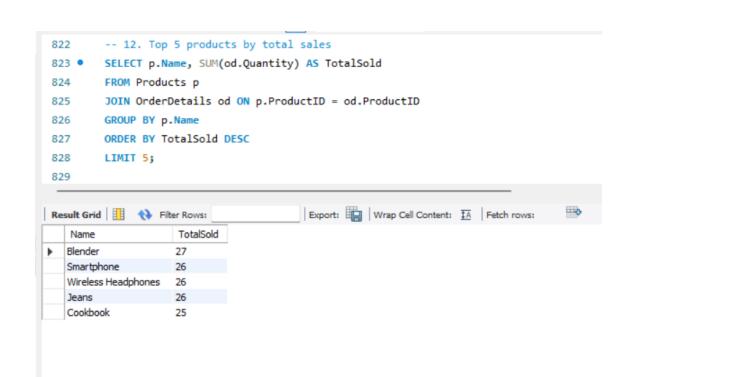
9. Customers who have purchased more than 1 different products

```
-- 9.Customers who have purchased more than 1 different products
803
804 •
         SELECT c.Name FROM Customers c
         JOIN Orders o ON c.CustomerID = o.CustomerID
805
         JOIN OrderDetails od ON o.OrderID = od.OrderID
806
         GROUP BY c.CustomerID
807
808
         HAVING COUNT(DISTINCT od.ProductID) > 1;
                                             Export: Wrap Cell Content: IA
Result Grid
              Filter Rows:
   Name
  Adam Smith
  Eve Johnson
  John Doe
  Jane Brown
  Michael Davis
  Sarah Wilson
  David Miller
  Emily Garcia
  Daniel Martinez
  Laura Rodriguez
   James Anderson
  Linda Thomas
  Robert Taylor
  Patricia Hernan...
  Charles Moore
   Jessica Jackson
  William White
  Barbara Harris
  Joseph Martin
```

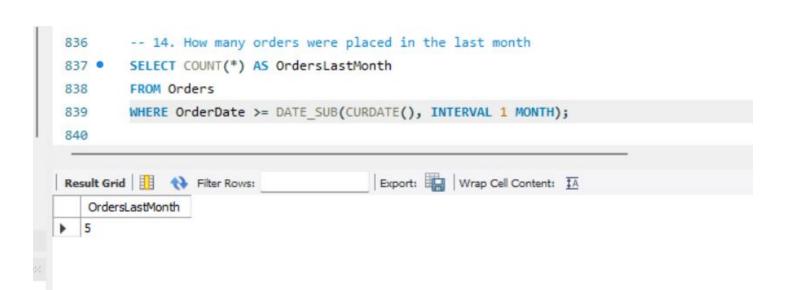
10. Average price of products in each category



```
-- 11. Total number of reviews for each product
816
817 •
         SELECT p.Name, COUNT(r.ReviewID) AS TotalReviews
818
         FROM Products p
         LEFT JOIN Reviews r ON p.ProductID = r.ProductID
819
         GROUP BY p.Name;
820
                                            Export: Wrap Cell Content: IA
Name
                      TotalReviews
                      7
  Smartphone
                      7
  Laptop
   Wireless Headphones
                      7
  Men's T-Shirt
                      7
  Women's Dress
                      7
   Jeans
                     7
   Cooking Pan
                      7
  Blender
  Dish Soap
                      7
  Fiction Novel
   Cookbook
                      7
  Self-Help Book
                      7
  Face Wash
                      6
  Shampoo
                     6
  Moisturizer
                      6
  Tennis Racket
                      6
                      6
  Yoga Mat
                     6
  Dumbbells
```



```
830
         -- 13.Total discounts applied to each product
831 •
         SELECT p.Name, SUM(d.DiscountAmount) AS TotalDiscount
832
         FROM Products p
         LEFT JOIN Discounts d ON p.ProductID = d.ProductID
833
         GROUP BY p.Name;
834
Export: Wrap Cell Content: IA
   Name
                      TotalDiscount
  Smartphone
                      1500.00
  Laptop
                      5000.00
  Wireless Headphones
  Men's T-Shirt
                      100.00
                      200.00
  Women's Dress
                     NULL
  Jeans
  Cooking Pan
                      50.00
                      250.00
  Blender
  Dish Soap
                     NULL
  Fiction Novel
  Cookbook
                      30.00
                     NULL
  Self-Help Book
                     NULL
  Face Wash
                      50.00
  Shampoo
  Moisturizer
                      70.00
  Tennis Racket
                      300.00
  Yoga Mat
                      100.00
  Dumbbells
                      200.00
  Children's Book
                     NULL
  Speaker
```



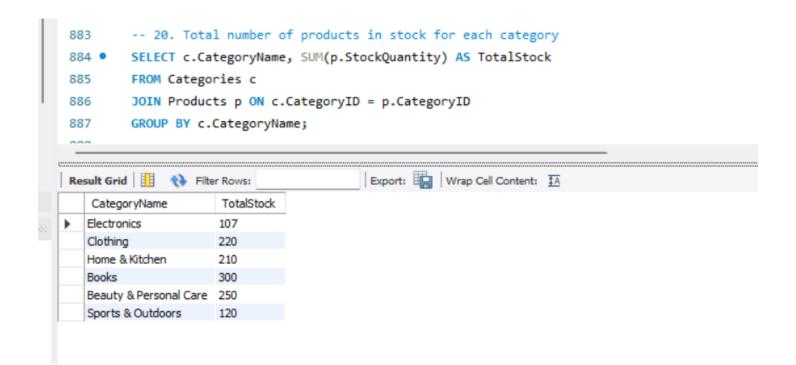
```
841
        -- 15. Products with the highest average rating
        SELECT p.Name, AVG(r.Rating) AS AverageRating
842 •
        FROM Products p
843
        JOIN Reviews r ON p.ProductID = r.ProductID
844
        GROUP BY p.Name
845
846
        ORDER BY AverageRating DESC
847
        LIMIT 5;
                                                                                   4
                                         Export: Wrap Cell Content: TA Fetch rows:
Name
              AverageRating
  Moisturizer
              4.6667
  Fiction Novel
              4.1429
  Men's T-Shirt
              4.1429
  Face Wash
              4.0000
              4.0000
```

```
-- 16. Total Revenue Generated in the Last Month
849
850 •
        SELECT SUM(od.Quantity * p.Price) AS TotalRevenueLastMonth
        FROM Orders o
851
        JOIN OrderDetails od ON o.OrderID = od.OrderID
852
        JOIN Products p ON od.ProductID = p.ProductID
853
        WHERE o.OrderDate >= NOW() - INTERVAL 1 MONTH;
854
855
Result Grid
                                          Export: Wrap Cell Content: TA
              Filter Rows:
   TotalRevenueLastMonth
  11986.00
```

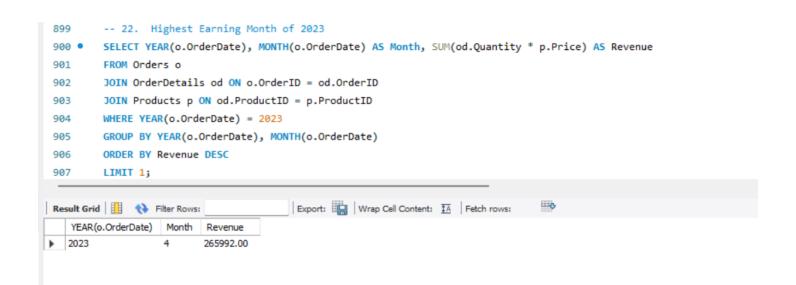
```
856
        -- 17.Total Revenue by Year
857 •
        SELECT YEAR(o.OrderDate) AS OrderYear, SUM(od.Quantity * p.Price) AS TotalRevenue
        FROM OrderDetails od
858
        JOIN Products p ON od.ProductID = p.ProductID
859
        JOIN Orders o ON od.OrderID = o.OrderID
860
861
        GROUP BY YEAR(o.OrderDate)
862
        ORDER BY OrderYear ASC;
863
Export: Wrap Cell Content: IA
   OrderYear
            TotalRevenue
            1034848.00
  2023
  2024
            772459.00
```

```
-- 18. Total Revenue for Every Month of the Year 2024
864
         SELECT MONTH(o.OrderDate) AS OrderMonth, SUM(od.Quantity * p.Price) AS TotalRevenue
865 •
         FROM OrderDetails od
866
         JOIN Products p ON od.ProductID = p.ProductID
867
         JOIN Orders o ON od.OrderID = o.OrderID
868
         WHERE YEAR(o.OrderDate) = 2024
869
         GROUP BY MONTH(o.OrderDate)
870
871
         ORDER BY TotalRevenue desc;
872
                                         Export: Wrap Cell Content: TA
OrderMonth TotalRevenue
  6
              219993.00
   10
              214795.00
   3
              122290.00
   2
              115691.00
   7
              22585.00
   11
              21279.00
   9
              19086.00
   4
              13485.00
   5
              9588.00
   1
              7982.00
   8
              5685.00
```

```
-- 19. Top 3 categories by total sales
873
874 •
         SELECT c.CategoryName, SUM(od.Quantity * p.Price) AS TotalSales
         FROM Categories c
875
         JOIN Products p ON c.CategoryID = p.CategoryID
876
         JOIN OrderDetails od ON p.ProductID = od.ProductID
877
         JOIN Orders o ON od.OrderID = o.OrderID
878
         GROUP BY c.CategoryName
879
         ORDER BY TotalSales DESC
880
         LIMIT 3;
881
                                                                                       Export: Wrap Cell Content: TA Fetch rows:
Result Grid Filter Rows:
   CategoryName
                  TotalSales
  Electronics
                  1498000.00
  Sports & Outdoors 95445.00
  Home & Kitchen
                 84843.00
```



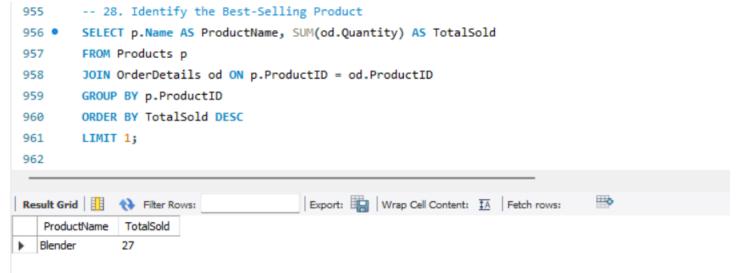
```
889
        -- 21. Revenue by Quarter of previous year 2023
        SELECT YEAR(o.OrderDate) AS Year,
890 •
891
            QUARTER(o.OrderDate) AS Quarter,
            SUM(od.Quantity * p.Price) AS Revenue
892
        FROM Orders o
893
        JOIN OrderDetails od ON o.OrderID = od.OrderID
894
        JOIN Products p ON od.ProductID = p.ProductID
895
        WHERE YEAR(o.OrderDate) = 2023
896
        GROUP BY YEAR(o.OrderDate), QUARTER(o.OrderDate);
897
898
Export: Wrap Cell Content: IA
   Year
                Revenue
         Quarter
  2023
                244962.00
        1
   2023 2
                292762.00
   2023
        3
                244559.00
  2023 4
                252565.00
```



```
-- 23.Total sales on weekends vs weekdays IN YEAR 2023
909
910 • ⊖ SELECT CASE
911
                     WHEN DAYOFWEEK(o.OrderDate) IN (1, 7) THEN 'Weekend'
                     ELSE 'Weekday'
912
                   END AS DayType,
913
                   SUM(od.Quantity * p.Price) AS TotalSales
914
915
          FROM Orders o
          JOIN OrderDetails od ON o.OrderID = od.OrderID
916
          JOIN Products p ON od.ProductID = p.ProductID
917
918
          WHERE YEAR(o.OrderDate) = 2023
919
          GROUP BY DayType;
                                                 Export: Wrap Cell Content: IA
DayType
              TotalSales
  Weekend
              354938.00
   Weekday 679910.00
920
921
        -- 24. Obtain All Nagative Reviews (Rating 1 or 2) Given by Customers to Products
922
        SELECT r.ReviewID, r.Comment, r.Rating, p.Name AS product name, c.Name AS Customer name
923
        FROM Reviews r
        JOIN Products p ON r.ProductID = p.ProductID
924
925
        JOIN Customers c ON r.CustomerID = c.CustomerID
926
        WHERE r.Rating <= 2
927
        limit 10;
Export: Wrap Cell Content: TA Fetch rows:
   ReviewID Comment
                                         Rating product_name
                                                             Customer_name
           Not what I expected, disappointed.
                                               Men's T-Shirt
                                                            John Doe
           Terrible experience, will not buy again. 1
                                               Women's Dress Jane Brown
  12
           Not worth the price.
                                               Self-Help Book
                                                           James Anderson
           Horrible quality, very disappointed.
                                        1
                                               Tennis Racket
                                                           Charles Moore
   19
           Not great, could use improvements.
                                         2
                                               Smartphone
                                                            Barbara Harris
  23
           Did not like it at all.
                                        1
                                             Women's Dress Margaret Martinez
  27
           Not satisfied, expected better.
                                               Dish Soap
                                                            Nancy Lewis
  32
           Not worth the money.
                                              Shampoo
                                                            Steven Allen
           Terrible product, do not buy.
                                                            Paul Wright
                                               Tennis Racket
  38
           Not what I expected.
                                               Laptop
                                                            Joshua Baker
```

```
935
        -- 26. Quarterly sales performance for 2024
        SELECT YEAR(o.OrderDate) AS Year,
936 •
937
            QUARTER(o.OrderDate) AS Quarter,
938
            SUM(od.Quantity * p.Price) AS Revenue
        FROM Orders o
939
        JOIN OrderDetails od ON o.OrderID = od.OrderID
940
        JOIN Products p ON od.ProductID = p.ProductID
941
        WHERE YEAR(o.OrderDate) = 2024
942
        GROUP BY YEAR(o.OrderDate), QUARTER(o.OrderDate);
943
                                        Export: Wrap Cell Content: TA
Year
        Quarter
                Revenue
  2024
                245963.00
  2024
                243066.00
  2024
                236074.00
  2024
        3
                47356.00
```

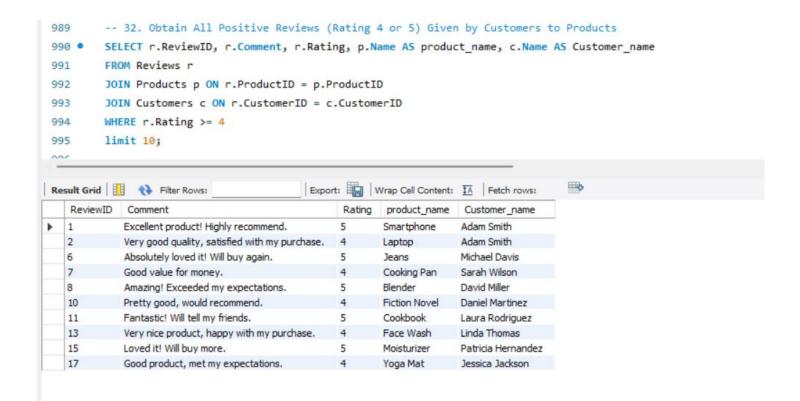
```
-- 27. Highest Earning Month of 2024
945
946
        SELECT YEAR(o.OrderDate), MONTH(o.OrderDate) AS Month, SUM(od.Quantity * p.Price) AS Revenue
        FROM Orders o
947
        JOIN OrderDetails od ON o.OrderID = od.OrderID
948
        JOIN Products p ON od.ProductID = p.ProductID
949
        WHERE YEAR(o.OrderDate) = 2024
950
        GROUP BY YEAR(o.OrderDate), MONTH(o.OrderDate)
951
952
        ORDER BY Revenue DESC
        LIMIT 1;
953
                                                                               Export: Wrap Cell Content: 🔀 Fetch rows:
YEAR(o.OrderDate) Month
                         Revenue
 2024
                        219993.00
```



```
-- 29 Total sales on weekends vs weekdays IN YEAR 2024
 963
 964 • ⊖ SELECT CASE
 965
                  WHEN DAYOFWEEK(o.OrderDate) IN (1, 7) THEN 'Weekend'
                  ELSE 'Weekday'
 966
                 END AS DayType,
 967
                 SUM(od.Quantity * p.Price) AS TotalSales
 968
          FROM Orders o
 969
          JOIN OrderDetails od ON o.OrderID = od.OrderID
 970
          JOIN Products p ON od.ProductID = p.ProductID
 971
 972
          WHERE YEAR(o.OrderDate) = 2024
          GROUP BY DayType;
 973
                                         Export: Wrap Cell Content: IA
 DayType
             TotalSales
    Weekday
            615999.00
    Weekend 156460.00
         -- 30. Identify the Least-Selling Product
975
        SELECT p.Name AS ProductName, SUM(od.Quantity) AS TotalSold
976
         FROM Products p
977
         JOIN OrderDetails od ON p.ProductID = od.ProductID
978
979
        GROUP BY p.ProductID
980
        ORDER BY TotalSold ASC
981
         LIMIT 1;
982
                                          Export: Wrap Cell Content: 🖽 Fetch rows:
Result Grid
              Filter Rows:
   ProductName
              TotalSold
```

Moisturizer

```
983
         -- 31. Products without any discounts
         SELECT p. Name
 984 •
 985
         FROM Products p
         LEFT JOIN Discounts d ON p.ProductID = d.ProductID
 986
 987
         WHERE d.DiscountAmount IS NULL;
 988
Export: Wrap Cell Content: IA
    Name
   Wireless Headphones
   Jeans
   Dish Soap
   Fiction Novel
   Self-Help Book
   Face Wash
   Children's Book
   Speaker
```



```
-- 33. Get the Number of Reviews for Each Product
 997
         SELECT p.ProductID, p.Name, COUNT(r.ReviewID) AS ReviewCount
998 •
999
         FROM Products p
1000
         LEFT JOIN Reviews r ON p.ProductID = r.ProductID
         GROUP BY p.ProductID, p.Name;
1001
Export: Wrap Cell Content: TA
    ProductID Name
                               ReviewCount
             Smartphone
                               7
   101
   102
                               7
             Laptop
             Wireless Headphones
   103
                              7
                              7
   104
             Men's T-Shirt
             Women's Dress
                               7
   105
                               7
   106
             Jeans
             Cooking Pan
                               7
   107
                               7
             Blender
   108
             Dish Soap
   109
                               7
                               7
             Fiction Novel
   110
                               7
             Cookbook
   111
                               7
             Self-Help Book
   112
             Face Wash
   113
                               6
             Shampoo
                               6
   114
             Moisturizer
                               6
   115
```

Tennis Racket

Yoga Mat

Dumbbells

Speaker

Children's Book

```
-- 34. the total number of orders delivered in the first half of the year 2024
 1003
 1004
 1005 •
          SELECT COUNT(o.OrderID) AS TotalOrdersDelivered
 1006
         FROM Orders o
          JOIN Shipping s ON o.OrderID = s.OrderID
 1007
          WHERE s.DeliveryDate >= '2024-01-01' AND s.DeliveryDate <= '2024-06-30';
 1008
                                       Export: Wrap Cell Content: TA
Result Grid Filter Rows:
    TotalOrdersDelivered
 ▶ 30
1010
          -- 35. Get Products with No Reviews
1011 •
        SELECT p.ProductID, p.Name
1012
         FROM Products p
1013
         LEFT JOIN Reviews r ON p.ProductID = r.ProductID
          WHERE r.ReviewID IS NULL;
1014
                                           Export: Wrap Cell Content: IA
ProductID
             Name
             Children's Book
   119
   120
             Speaker
          -- 36. The sales of each category where total sales exceeds 80000
1016
         SELECT c.CategoryName, SUM(od.Quantity * p.Price) AS TotalSales
1017 •
1018
          FROM Categories c
          JOIN Products p ON c.CategoryID = p.CategoryID
1019
1020
          JOIN OrderDetails od ON p.ProductID = od.ProductID
          JOIN Orders o ON od.OrderID = o.OrderID
1021
          GROUP BY c.CategoryName
1022
          having TotalSales > 80000;
1023
                                          Export: Wrap Cell Content: IA
 CategoryName
                   TotalSales
   Electronics
                  1498000.00
    Home & Kitchen
                  84843.00
    Sports & Outdoors 95445.00
```

```
-- 37. Get Products with an Average Rating Below 3
  1025
              SELECT p.ProductID, p.Name, AVG(r.Rating) AS AverageRating
  1026 •
              FROM Products p
  1027
              JOIN Reviews r ON p.ProductID = r.ProductID
  1028
              GROUP BY p.ProductID, p.Name
  1029
  1030
              HAVING AVG(r.Rating) < 3;
                                                        Export: Wrap Cell Content: TA
   Result Grid
                     Filter Rows:
       ProductID
                   Name
                                    AverageRating
      105
                   Women's Dress
                                    2,4286
       109
                   Dish Soap
                                    2.8571
       112
                   Self-Help Book
                                    2.7143
       114
                   Shampoo
                                    2.3333
      116
                  Tennis Racket
                                    2.1667
         -- 38. Show Product Wise Min, Max, Avg, Count, Sum Orders
1032
         SELECT p.ProductID, p.Name,
1033 •
             MIN(od.Quantity) AS MinOrderQuantity,
1034
1035
             MAX(od.Quantity) AS MaxOrderQuantity,
             AVG(od.Quantity) AS AvgOrderQuantity,
1036
             COUNT(od.DetailID) AS OrderCount,
1037
             SUM(od.Quantity) AS TotalOrdered
1038
         FROM Products p
1039
         LEFT JOIN OrderDetails od ON p.ProductID = od.ProductID
1040
         GROUP BY p.ProductID, p.Name;
1041
Export: Wrap Cell Content: IA
    ProductID
                               MinOrderQuantity
                                              MaxOrderQuantity
                                                              AvgOrderQuantity
                                                                              OrderCount
                                                                                         TotalOrdered
             Name
   101
             Smartphone
                               2
                                              5
                                                              3.7143
                                                                              7
                                                                                         26
                                                                             7
   102
             Laptop
                               2
                                              4
                                                              2.5714
                                                                                         18
   103
             Wireless Headphones
                                              5
                                                              3.7143
                                                                              7
                                                                                         26
            Men's T-Shirt
   104
                               1
                                              5
                                                                             7
                                                                                         13
                                                              1.8571
                                              4
                                                                             7
                                                                                         22
   105
             Women's Dress
                               1
                                                              3.1429
                                              5
                                                                             7
   106
             Jeans
                               2
                                                              3.7143
                                                                                         26
   107
             Cooking Pan
                               2
                                                                              7
                                                                                         18
                                                              2.5714
   108
             Blender
                               3
                                              6
                                                                             7
                                                                                         27
                                                              3.8571
   109
             Dish Soap
                                              5
                                                                             7
                                                                                         12
                               1
                                                              1.7143
                               1
                                              4
                                                                             7
                                                                                         24
   110
             Fiction Novel
                                                              3.4286
   111
             Cookbook
                               1
                                              5
                                                              3.5714
                                                                              7
                                                                                         25
                                                                             7
                                              5
             Self-Help Book
                               1
                                                                                         19
   112
                                                              2.7143
             Face Wash
                               3
                                              5
                                                                             6
                                                                                         21
   113
                                                              3.5000
             Shampoo
                                              5
   114
                               1
                                                                             6
                                                                                         20
                                                              3.3333
   115
             Moisturizer
                                                              1.8333
                                                                                         11
```

```
1043
           -- 39. Find Average Delivery Time from OrderDate to DeliveryDate
           SELECT AVG(DATEDIFF(s.DeliveryDate, o.OrderDate)) AS AvgDeliveryTime
 1044 •
           FROM Orders o
 1045
           JOIN Shipping s ON o.OrderID = s.OrderID;
 1046
                                            Export: Wrap Cell Content: TA
 AvgDeliveryTime
 1.5500
         -- 40. Get Total Quantity Sold for Each Product
1048
         SELECT p.ProductID, p.Name, SUM(od.Quantity) AS TotalSold
1049
         FROM Products p
1050
         JOIN OrderDetails od ON p.ProductID = od.ProductID
1051
         GROUP BY p.ProductID, p.Name;
1052
Export: Wrap Cell Content: IA
    ProductID
                               TotalSold
             Name
   101
             Smartphone
                               26
   102
                               18
             Laptop
   103
             Wireless Headphones
                               26
   104
             Men's T-Shirt
                               13
             Women's Dress
   105
                               22
                               26
   106
             Jeans
   107
             Cooking Pan
                               18
                               27
   108
             Blender
             Dish Soap
   109
                               12
                               24
   110
             Fiction Novel
             Cookbook
                               25
   111
   112
             Self-Help Book
                               19
   113
             Face Wash
                               21
                               20
   114
             Shampoo
             Moisturizer
   115
                               11
   116
             Tennis Racket
                               11
   117
             Yoga Mat
                               20
```

118

Dumbbells

24

```
-- 41. Get Customers Who Have Not Placed Any Orders
1054
1055 •
           SELECT c.CustomerID, c.Name
1056
           FROM Customers c
           LEFT JOIN Orders o ON c.CustomerID = o.CustomerID
1057
           WHERE o.OrderID IS NULL;
1058
                                                  Export: Wrap Cell Content: IA
 Result Grid
                Filter Rows:
    CustomerID
                 Name
                 john wick
    101
    102
                 Jane Doe
    103
                 David Lee
                 Sarah Jones
    104
    105
                 Michael Brown
    106
                 Emily Davis
                 Daniel White
    107
                 Olivia Miller
    108
                 James Wilson
    109
1060
          -- 42. Get All Orders with Shipping Information
          SELECT o.OrderID, o.OrderDate, s.ShipDate, s.DeliveryDate
1061 •
          FROM Orders o
1062
1063
          JOIN Shipping s ON o.OrderID = s.OrderID
          limit 10;
1064
                                             Export: Wrap Cell Content: A Fetch rows:
 OrderID OrderDate
                                ShipDate
                                                  DeliveryDate
    1001
            2023-01-01 01:00:00
                               2023-01-02 02:00:50
                                                  2023-01-03 01:00:00
    1002
            2023-01-06 12:34:56
                               2023-01-07 13:30:57
                                                  2023-01-08 12:34:56
    1003
            2023-01-11 08:15:30
                               2023-01-12 08:15:30
                                                  2023-01-13 08:15:30
    1004
            2023-01-17 20:45:12
                               2023-01-18 21:45:12 2023-01-19 20:45:12
    1005
            2023-01-21 19:30:00
                               2023-01-22 20:30:00
                                                  2023-01-23 19:30:00
    1006
            2023-01-27 14:22:33 2023-01-28 16:22:33 2023-01-29 14:22:33
            2023-02-02 03:45:00
                               2023-02-03 03:45:00
                                                  2023-02-04 03:45:00
    1007
    1008
            2023-02-03 11:11:11
                               2023-02-04 11:11:11 2023-02-05 11:11:11
    1009
            2023-02-16 22:22:22
                               2023-02-17 22:22:22
                                                  2023-02-18 22:22:22
    1010
            2023-02-19 17:17:17 2023-02-20 17:17:17 2023-02-21 17:17:17
```

```
1066
          -- 43. Get the Lowest Rated Product
1067 •
         SELECT p.ProductID, p.Name, AVG(r.Rating) AS AverageRating
 1068
         FROM Products p
         JOIN Reviews r ON p.ProductID = r.ProductID
 1069
         GROUP BY p.ProductID, p.Name
 1070
 1071
         ORDER BY AverageRating ASC
 1072
         LIMIT 1;
 1073
                                        Export: Wrap Cell Content: TA Fetch rows:
 Result Grid Filter Rows:
    ProductID
                         AverageRating
 116
             Tennis Racket
                        2.1667
1074
         -- 44. Get All Products with Stock quantity below 10
1075
         SELECT p.ProductID, p.Name, p.StockQuantity
         FROM Products p
1076
         WHERE p.StockQuantity < 10;
1077
                                          Edit: 🚄 📆 🖺 Export/Import: 📳 🦝
 ProductID
             Name
                      StockQuantity
   120
             Speaker
                     7
   NULL
                     NULL
             NULL
           -- 45. Get All Orders with More Than 5 Items
 1079
           SELECT o.OrderID, SUM(od.Quantity) AS TotalItems
 1080 •
           FROM Orders o
 1081
           JOIN OrderDetails od ON o.OrderID = od.OrderID
 1082
           GROUP BY o.OrderID
 1083
           HAVING TotalItems > 5;
 1084
 1085
  Export: Wrap Cell Content: TA
     OrderID
             TotalItems
     1008
             6
```

```
-- 46. Get All Products That Have Never Been Ordered
  1086
  1087 •
              SELECT p.ProductID, p.Name
  1088
              FROM Products p
              LEFT JOIN OrderDetails od ON p.ProductID = od.ProductID
  1089
              WHERE od.DetailID IS NULL;
  1090
  1001
                                                     Export: Wrap Cell Content: IA
   ProductID
                   Name
                  Children's Book
       119
                  Speaker
       120
1092
         -- 47. Get All Products with Their Categories and Discounts
         SELECT p.ProductID, p.Name, c.CategoryName, d.DiscountAmount
1093 •
1094
         FROM Products p
         JOIN Categories c ON p.CategoryID = c.CategoryID
1095
         LEFT JOIN Discounts d ON p.ProductID = d.ProductID
1096
         order by d.DiscountAmount DESC
1097
1098
         LIMIT 12;
1099
                                          Export: Wrap Cell Content: TA Fetch rows:
ProductID
             Name
                          CategoryName
                                             DiscountAmount
                                            5000.00
   102
                          Electronics
             Laptop
   101
             Smartphone
                          Electronics
                                            1500.00
             Tennis Racket
                                            300.00
   116
                          Sports & Outdoors
             Blender
                          Home & Kitchen
   108
                                            250.00
   105
             Women's Dress
                          Clothing
                                            200.00
   118
             Dumbbells
                          Sports & Outdoors
                                            200.00
   104
             Men's T-Shirt
                          Clothing
                                             100.00
   117
             Yoga Mat
                          Sports & Outdoors
                                            100.00
                          Beauty & Personal Care 70.00
             Moisturizer
   115
   107
             Cooking Pan
                          Home & Kitchen
                                            50.00
   114
             Shampoo
                          Beauty & Personal Care 50.00
   111
             Cookbook
                          Books
                                            30.00
```

```
1100
         -- 48. Total Revenue for the 4th Quarter of 2024
1101 •
         SELECT SUM(od.Quantity * p.Price) AS 4th_qtr_Revenue
1102
         FROM Orders o
         JOIN OrderDetails od ON o.OrderID = od.OrderID
1103
         JOIN Products p ON od.ProductID = p.ProductID
1104
         WHERE QUARTER(o.OrderDate) = 4 AND YEAR(o.OrderDate) = 2024;
1105
                                        Export: Wrap Cell Content: IA
4th_qtr_Revenue
236074.00
         -- 49. Get the Most Popular Product Based on Sales Volume
1107
         SELECT p.ProductID, p.Name,
1108
                 (SELECT SUM(od.Quantity)
1109
                  FROM OrderDetails od
1110
                  WHERE od.ProductID = p.ProductID) AS TotalSalesVolume
1111
1112
         FROM Products p
         ORDER BY TotalSalesVolume DESC
1113
1114
         LIMIT 3;
 Result Grid
                                           Export: Wrap Cell Content: TA Fetch rows:
             Filter Rows:
    ProductID
            Name
                               TotalSalesVolume
             Blender
   108
                               27
   101
             Smartphone
                               26
   103
             Wireless Headphones
                               26
```

```
-- 50. Deliveries between 6:00 AM and 12:00 PM (Morning Deliveries)
1116
1117 • SELECT ShippingId, OrderId, DATE(deliverydate) AS Delivery_date, TIME(deliverydate) AS Delivery_Time
      FROM shipping
1118
        WHERE HOUR(deliverydate) >= 6 AND HOUR(deliverydate) < 12
1119
1120
        order by Delivery_date
         limit 10;
1121
                                       Export: Wrap Cell Content: TA Fetch rows:
ShippingId OrderId Delivery_date Delivery_Time
            1003
                               08:15:30
   3
                    2023-01-13
            1003 2023-01-13 08:15:30
1008 2023-02-05 11:11:11
   11
            1011
                   2023-02-28
                               09:09:09
          1012 2023-03-05 06:06:06
   12
   18
            1018
                  2023-04-08 10:10:10
          1023 2023-05-09 11:11:11
   23
   25
            1025 2023-05-19 07:07:07
          1033 2023-07-11 09:09:09
   33
   38
            1038 2023-08-09 10:10:10
   43
         1043 2023-09-11 11:00:11
```