
Superstore Dataset (60 rows)

OrderID,OrderDate,ShipDate,Region,City,CustomerID,CustomerName,Segment,Category,SubCategory,ProductName,Quantity,UnitPrice,Discount,Sales,Profit,Returned

1001,2024-01-02,2024-01-05,West,Los Angeles,C001,David

Miller,Consumer,Technology,Laptops,HP Pavilion 15,1,720,0,720,95,No

1002,2024-01-02,2024-01-06,Central,Chicago,C002,Sarah

Johnson,Corporate,Furniture,Chairs,ErgoMax Pro Chair,2,140,0.1,252,30,No

1003,2024-01-03,2024-01-07,East,New York,C003,John Lee,Home Office,Office Supplies,Binders,Premium Binder Pack,5,12,0,60,11,No

1004,2024-01-03,2024-01-08,South,Miami,C004,Ana

Gomez,Consumer,Technology,Phones,Samsung Galaxy

A54,1,399,0.05,379.05,48,No

1005,2024-01-04,2024-01-09,West,Seattle,C005,Karen

Black,Consumer,Furniture,Tables,Oak Wooden Table,1,450,0,450,52,Yes

1006,2024-01-04,2024-01-08,Central,Denver,C006,Robert

Brown,Corporate,Office Supplies,Pens,Blue Pen Pack (20),3,8,0,24,5,No

1007,2024-01-05,2024-01-10,East,Boston,C007,Emily

Davis,Consumer,Technology,Accessories,Wireless Mouse,4,18,0,72,14,No

1008,2024-01-05,2024-01-11,South,Atlanta,C008,Kyle Young,Home Office,Furniture,Chairs,ComfortMesh Chair,1,160,0.15,136,19,No

1009,2024-01-06,2024-01-12,West,Portland,C009,Sophia

Hill,Consumer,Technology,Phones,iPhone SE,2,429,0,858,115,No

1010,2024-01-06,2024-01-13,Central,St. Louis,C010,Tom

Harris,Corporate,Office Supplies,Paper,A4 Copier Paper (500),10,5,0,50,6,No

1011,2024-01-07,2024-01-14,East,Philadelphia,C011,Olivia Adams,Home Office,Furniture,Tables,Adjustable Standing Desk,1,320,0.1,288,35,No

1012,2024-01-07,2024-01-15,South,Orlando,C012,Ethan

Clark,Consumer,Technology,Accessories,USB-C Cable,6,9,0,54,12,No

1013,2024-01-08,2024-01-16,West,San Diego,C013,Isabella

Scott,Consumer,Furniture,Sofas,Modern Sofa 3-Seater,1,850,0.2,680,88,Yes

1014,2024-01-08,2024-01-17,Central,Minneapolis,C014,George

Wilson,Corporate,Office Supplies,Markers,Color Marker Set,4,7,0,28,4,No

1015,2024-01-09,2024-01-18,East,Newark,C015,Abigail

Perez,Consumer,Technology,Tablets,iPad 10th Gen,1,450,0.05,427.5,60,No

1016,2024-01-09,2024-01-19,South,Charlotte,C016,Noah Walker,Home Office,Furniture,Desks,Compact Writing Desk,1,210,0,210,27,No

1017,2024-01-10,2024-01-20,West,Las Vegas,C017,Michael Green,Consumer,Technology,TVs,Sony 43-inch LED,1,540,0.1,486,62,No
1018,2024-01-10,2024-01-21,Central,Columbus,C018,Chloe Ramirez,Corporate,Office Supplies>Notebooks,Hardcover Notebook,8,4,0,32,6,No
1019,2024-01-11,2024-01-22,East,Baltimore,C019,Lucas Cook,Consumer,Technology,Accessories,Laptop Stand,2,24,0,48,12,No
1020,2024-01-11,2024-01-23,South,Nashville,C020,Ava Howard,Home Office,Furniture,Chairs,Executive Leather Chair,1,260,0.05,247,28,No
1021,2024-01-12,2024-01-24,West,Sacramento,C021,Daniel Ward,Consumer,Furniture,Bed,Queen Bed Frame,1,600,0.1,540,72,Yes
1022,2024-01-12,2024-01-25,Central,Kansas City,C022,Harper Reed,Corporate,Office Supplies,Envelopes,White Envelope Pack,6,3,0,18,3,No
1023,2024-01-13,2024-01-26,East,Pittsburgh,C023,Benjamin Brooks,Consumer,Technology,Accessories,Keyboard,3,22,0.1,59.4,9,No
1024,2024-01-13,2024-01-27,South,San Antonio,C024,Grace Bennett,Home Office,Furniture,Shelves,Wooden Shelf Unit,1,180,0,180,24,No
1025,2024-01-14,2024-01-28,West,Fresno,C025,Elijah Rivera,Consumer,Technology,Laptops,Dell Inspiron 14,1,640,0,640,85,No
1026,2024-01-14,2024-01-29,Central,Indianapolis,C026,Mia Mitchell,Corporate,Office Supplies,Stapler,Premium Stapler,2,14,0,28,5,No
1027,2024-01-15,2024-01-30,East,Cleveland,C027,Henry Price,Consumer,Furniture,Tables,Round Dining Table,1,520,0.05,494,58,No
1028,2024-01-15,2024-01-31,South,Dallas,C028,Lily Torres,Home Office,Technology,Printers,HP LaserJet Pro,1,290,0,290,34,No
1029,2024-01-16,2024-02-01,West,San Jose,C029,Owen Jenkins,Consumer,Office Supplies,Binders,Premium Binders (12),2,11,0,22,4,No
1030,2024-01-16,2024-02-02,Central,Detroit,C030,Aiden Lewis,Corporate,Technology,Accessories,Webcam,1,45,0,45,9,No

A. DATA LOADING & INSPECTION (5)

1. Load the CSV and display first 10 rows.
 2. Show total number of rows and columns.
 3. Find data types of each column.
 4. Identify columns containing missing values.
 5. Convert OrderDate and ShipDate to datetime.
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B. CLEANING & TRANSFORMATIONS (5)

6. Create a new column ShippingDays = ShipDate - OrderDate.
 7. Create ProfitMargin = Profit / Sales.
 8. Standardize CustomerName to title case.
 9. Remove rows where Sales is zero or negative.
 10. Convert Discount from decimal to percentage format.
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C. FILTERING (5)

11. Filter all orders from the West region.
 12. Filter Technology category with Sales > 400.
 13. Find all products returned by customers.
 14. Show Furniture orders shipped after 2024-01-20.
 15. Filter orders where Profit < 20.
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D. SORTING (5)

16. Sort by Sales descending.
 17. Sort by ProfitMargin.
 18. Sort by Region then City.
 19. Sort by ShippingDays largest to smallest.
 20. Sort by CustomerName alphabetical.
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E. GROUPBY ANALYSIS (6)

21. Total Sales per Region.
 22. Average Profit per Category.
 23. Count of orders per Customer.
 24. Sum of Sales per Segment.
 25. Total Quantity sold per SubCategory.
 26. Mean ShippingDays grouped by Category.
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