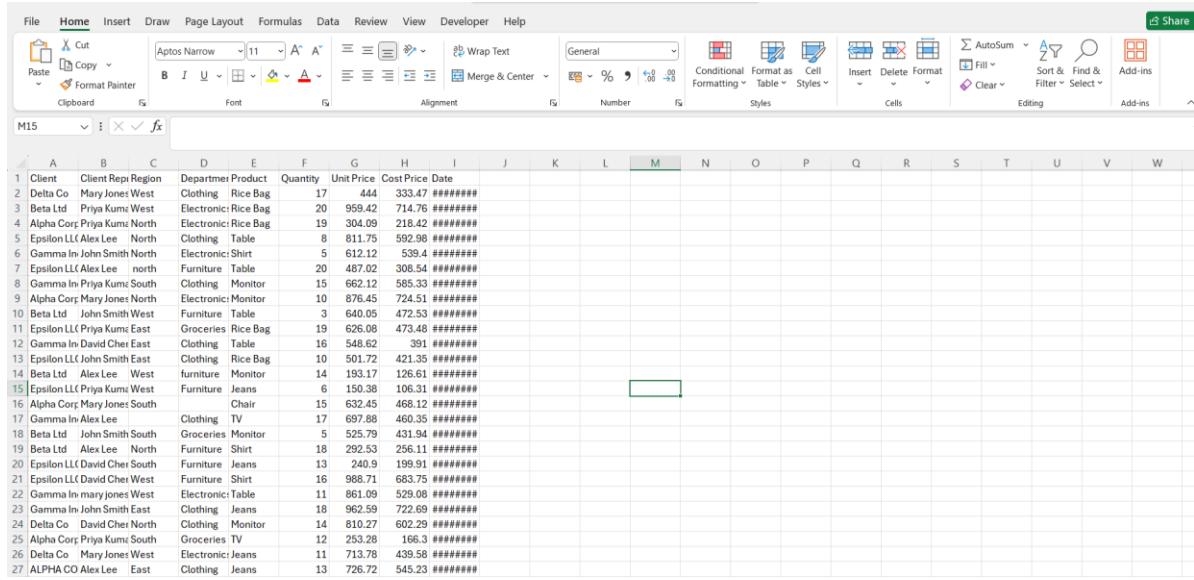


Sales Performance Analysis – Excel Data Cleaning & Analysis Documentation

Project Overview

- Dataset:** Messy sales dataset
- Columns:** Client, Client Representative, Region, Department, Product, Quantity, Unit Price, Cost Price, Date
- Purpose:** Demonstrate data cleaning, transformation, and analysis in Excel.

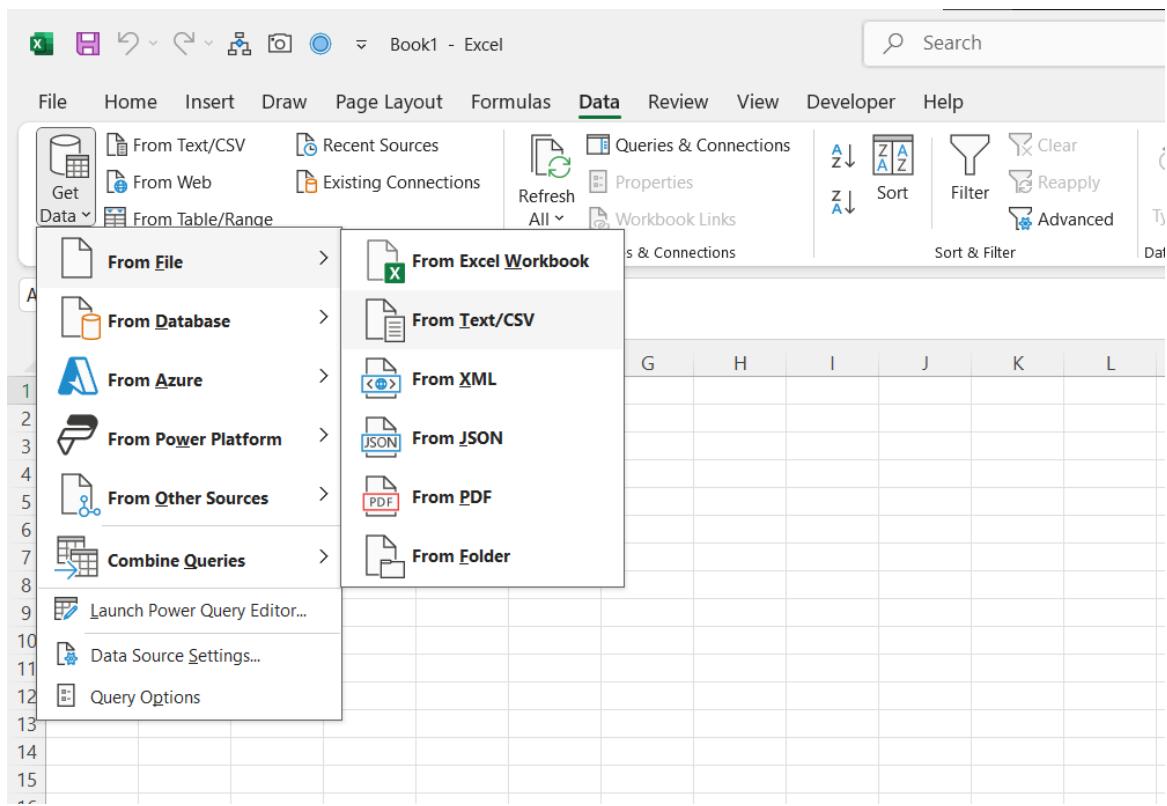


The screenshot shows a Microsoft Excel spreadsheet with data in rows 1 through 27. The columns are labeled A through W. The data includes client information, department names, product names, and numerical values. Many cells contain errors (e.g., #####) or incorrect data (e.g., 'Rice Bag' in the 'Cost Price' column). The Excel ribbon at the top shows the Home tab selected, and the formula bar at the bottom has 'fx' selected.

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	Client	Client Rep/Region	Department	Product	Quantity	Unit Price	Cost Price	Date														
2	Delta Co	Mary Jones West	Clothing	Rice Bag	17	444	333.47	#####														
3	Beta Ltd	Priya Kuntz West	Electronic	Rice Bag	20	959.42	714.76	#####														
4	Alpha Corp	Priya Kuntz North	Electronic	Rice Bag	19	304.09	218.42	#####														
5	Epsilon LLC	Alex Lee North	Clothing	Table	8	811.75	592.98	#####														
6	Gamma Inc	John Smith North	Electronic	Shirt	5	612.12	539.4	#####														
7	Epsilon LLC	Alex Lee North	Furniture	Table	20	487.02	308.54	#####														
8	Gamma Inc	Priya Kuntz South	Clothing	Monitor	15	662.12	585.33	#####														
9	Alpha Corp	Mary Jones North	Electronic	Monitor	10	876.45	724.51	#####														
10	Beta Ltd	John Smith West	Furniture	Table	3	640.05	472.53	#####														
11	Epsilon LLC	Priya Kuntz East	Groceries	Rice Bag	19	626.00	473.48	#####														
12	Gamma Inc	David Chen East	Clothing	Table	16	548.62	391	#####														
13	Epsilon LLC	John Smith East	Clothing	Rice Bag	10	501.72	421.35	#####														
14	Beta Ltd	Alex Lee West	Furniture	Monitor	14	193.17	126.61	#####														
15	Epsilon LLC	Priya Kuntz West	Furniture	Jeans	6	150.30	106.31	#####														
16	Alpha Corp	Mary Jones South	Clothing	Chair	15	632.45	468.12	#####														
17	Gamma Inc	Alex Lee East	Clothing	TV	17	697.88	460.35	#####														
18	Beta Ltd	John Smith South	Groceries	Monitor	5	525.79	431.94	#####														
19	Beta Ltd	Alex Lee North	Furniture	Shirt	18	282.53	256.11	#####														
20	Epsilon LLC	David Chen South	Furniture	Jeans	13	240.9	199.91	#####														
21	Epsilon LLC	David Chen West	Furniture	Shirt	16	988.71	683.75	#####														
22	Gamma Inc	Mary Jones West	Electronic	Table	11	861.09	529.08	#####														
23	Gamma Inc	John Smith East	Clothing	Jeans	18	962.50	722.69	#####														
24	Delta Co	David Chen North	Clothing	Monitor	14	810.27	602.29	#####														
25	Alpha Corp	Priya Kuntz South	Groceries	TV	12	253.20	166.3	#####														
26	Delta Co	Mary Jones West	Electronic	Jeans	11	713.78	439.58	#####														
27	ALPHA CO	Alex Lee East	Clothing	Jeans	13	726.72	545.23	#####														

Step 1: Import CSV File

- Open a new Excel workbook.
- Go to the **Data** tab → click **Get Data** → **From Text/CSV**.
- Browse and select the raw CSV dataset file.
- Click **Load** to import the data into Excel.



The screenshot shows the Microsoft Power Query Editor within Excel. The 'Get & Transform Data' ribbon tab is active. A preview of a CSV file named 'Sales_Data.csv' is displayed, showing data for various clients across different regions and departments. The preview pane shows the first 200 rows of the data. The editor interface includes tabs for 'File', 'Home', 'Insert', 'Page Layout', 'Formulas', 'Data', 'Review', 'View', 'Developer', and 'Help'. On the right side, there are sections for 'Data Analysis' and 'Analysis'. At the bottom, there are buttons for 'Load', 'Transform Data', and 'Cancel'.

Client	Client Representative	Region	Department	Product	Quantity	Unit Price	Cost Price	Date
Delta Co	Mary Jones	West	Clothing	Rice Bag	17	444	334.47	09-12-2024
Beta Ltd	Priya Kumar	West	Electronics	Rice Bag	20	958.42	714.76	06-09-2024
Alpha Corp	Priya Kumar	North	Electronics	Rice Bag	19	304.09	218.42	05-12-2024
Epsilon LLC	Alex Lee	North	Clothing	Table	8	811.75	592.98	16-09-2024
Gamma Inc	John Smith	North	Electronics	Shirt	5	612.12	539.4	18-11-2024
Epsilon LLC	Alex Lee	North	Furniture	Table	20	487.02	308.54	21-03-2024
Gamma Inc	Priya Kumar	South	Clothing	Monitor	15	662.12	585.33	03-07-2024
Alpha Corp	Mary Jones	North	Electronics	Monitor	10	876.45	724.51	22-11-2024
Beta Ltd	John Smith	West	Furniture	Table	3	640.05	472.53	07-07-2024
Epsilon LLC	Priya Kumar	East	Groceries	Rice Bag	19	626.08	471.48	29-11-2024
Gamma Inc	David Chen	East	Clothing	Table	16	548.62	391	11-01-2024
Epsilon LLC	John Smith	East	Clothing	Rice Bag	10	501.72	421.35	04-01-2024
Beta Ltd	Alex Lee	West	Furniture	Monitor	14	193.17	126.61	11-09-2024
Epsilon LLC	Priya Kumar	West	Furniture	Jeans	6	150.38	106.31	28-11-2024
Alpha Corp	Mary Jones	South	Clothing	Chair	15	632.45	468.12	23-04-2024
Gamma Inc	Alex Lee	South	Clothing	TV	17	697.88	460.35	27-09-2024
Beta Ltd	John Smith	South	Groceries	Monitor	5	525.79	431.94	22-07-2024
Beta Ltd	Alex Lee	North	Furniture	Shirt	18	292.53	255.11	25-08-2024
Epsilon LLC	David Chen	South	Furniture	Jeans	13	240.9	199.91	01-03-2024
Epsilon LLC	David Chen	West	Furniture	Shirt	16	988.78	683.75	24-05-2024

The screenshot shows the Microsoft Excel interface with the 'Table Design' tab selected. A table titled 'Sales_Data' is visible, containing 27 rows of sales data. The table includes columns for Client, Representative, Region, Department, Product, Quantity, Unit Price, Cost Price, and Date. The data spans from row 1 to row 27. The first row is a header with a green background, and subsequent rows have various colored backgrounds (green, yellow, blue, etc.). The 'Table Styles' ribbon at the top right offers a variety of color schemes. On the right side, the 'Queries & Connections' pane displays a single query named 'Sales_Data' which has loaded 103 rows.

Step 2: Change Table Style

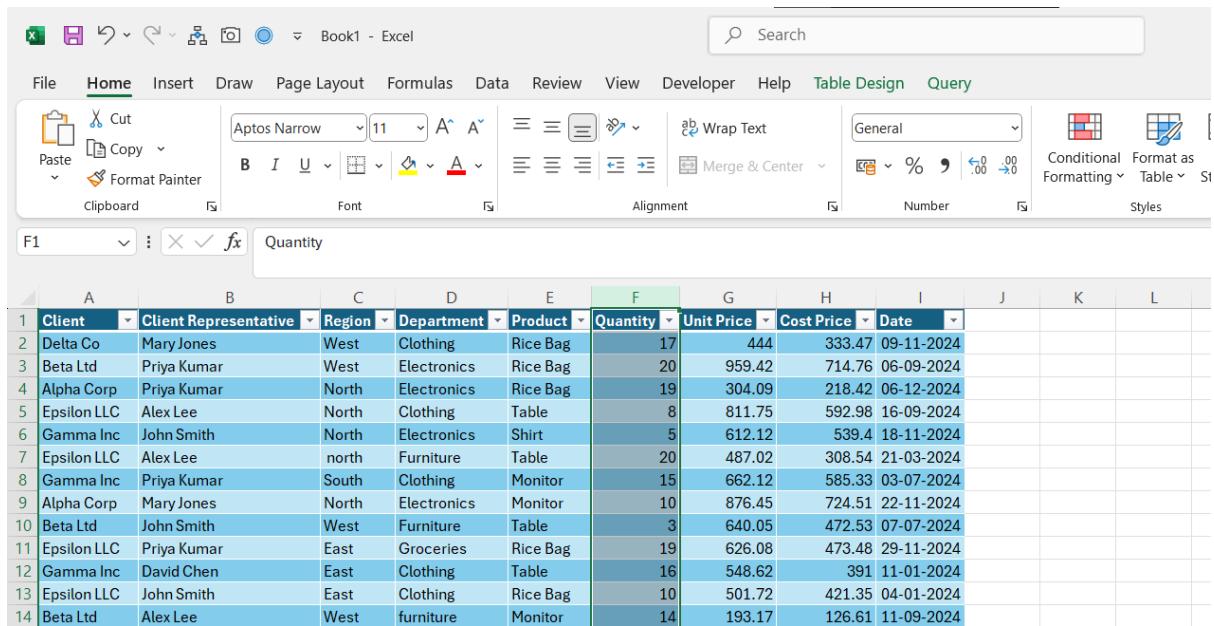
1. Select anywhere in the table.
2. Go to the Table Design tab.
3. Under Table Styles, change the style colour from Green to Blue for better visual clarity.

This screenshot shows the same Excel environment as the previous one, but the table style has been changed. The header row is now blue, and the rows below it are also blue, creating a more uniform look. The data rows themselves retain their original colors (green, yellow, blue). The 'Table Design' tab is still active, and the 'Queries & Connections' pane is visible on the right.

Step 3: Format Columns

a) Quantity Column

1. Select the Quantity column.
2. Go to Home → Number Format → More Number Formats.
3. Choose Number category.
4. Set Decimal places to 0.
5. Click OK.



A	B	C	D	E	F	G	H	I	J	K	L
1	Client	Client Representative	Region	Department	Product	Quantity	Unit Price	Cost Price	Date		
2	Delta Co	Mary Jones	West	Clothing	Rice Bag	17	444	333.47	09-11-2024		
3	Beta Ltd	Priya Kumar	West	Electronics	Rice Bag	20	959.42	714.76	06-09-2024		
4	Alpha Corp	Priya Kumar	North	Electronics	Rice Bag	19	304.09	218.42	06-12-2024		
5	Epsilon LLC	Alex Lee	North	Clothing	Table	8	811.75	592.98	16-09-2024		
6	Gamma Inc	John Smith	North	Electronics	Shirt	5	612.12	539.4	18-11-2024		
7	Epsilon LLC	Alex Lee	north	Furniture	Table	20	487.02	308.54	21-03-2024		
8	Gamma Inc	Priya Kumar	South	Clothing	Monitor	15	662.12	585.33	03-07-2024		
9	Alpha Corp	Mary Jones	North	Electronics	Monitor	10	876.45	724.51	22-11-2024		
10	Beta Ltd	John Smith	West	Furniture	Table	3	640.05	472.53	07-07-2024		
11	Epsilon LLC	Priya Kumar	East	Groceries	Rice Bag	19	626.08	473.48	29-11-2024		
12	Gamma Inc	David Chen	East	Clothing	Table	16	548.62	391	11-01-2024		
13	Epsilon LLC	John Smith	East	Clothing	Rice Bag	10	501.72	421.35	04-01-2024		
14	Beta Ltd	Alex Lee	West	furniture	Monitor	14	193.17	126.61	11-09-2024		

Aptos N°	11	A [^]	A ^v	<input checked="" type="checkbox"/>	%	,	Print
B	I	≡	↳	A	█	█	█
Quantity	Unit Price	Cost Price	Date				
				11-2024			
				09-2024			
	Cut			12-2024			
	Copy			09-2024			
	Paste Options:			11-2024			
	 			03-2024			
	Paste Special...			07-2024			
				11-2024			
	Insert			11-2024			
	Delete			01-2024			
	Clear Contents			01-2024			
				09-2024			
				11-2024			
	Format Cells...			04-2024			
				03-2024			
	Column Width...			07-2024			
				08-2024			
	Hide			03-2024			
				05-2024			
	Unhide			04-2024			
11	861.05	529.00	23-04-2024				
18	962.59	722.69	16-07-2024				

Quantity

Representative	Region	Department	Product	Quantity	Unit Price	Cost Price	Date
	West						
	West						
	North						
	North						
	North						
	North						
	South						
	North						
	West						
	East						
	East						
	East						
	West						
	West						
	South						
	Unknown						
	South						
	North						
	South						
	West						
	West						
	East						
	North						
	South						
	West						
	East						

Format Cells

Number Alignment Font Border Fill Protection

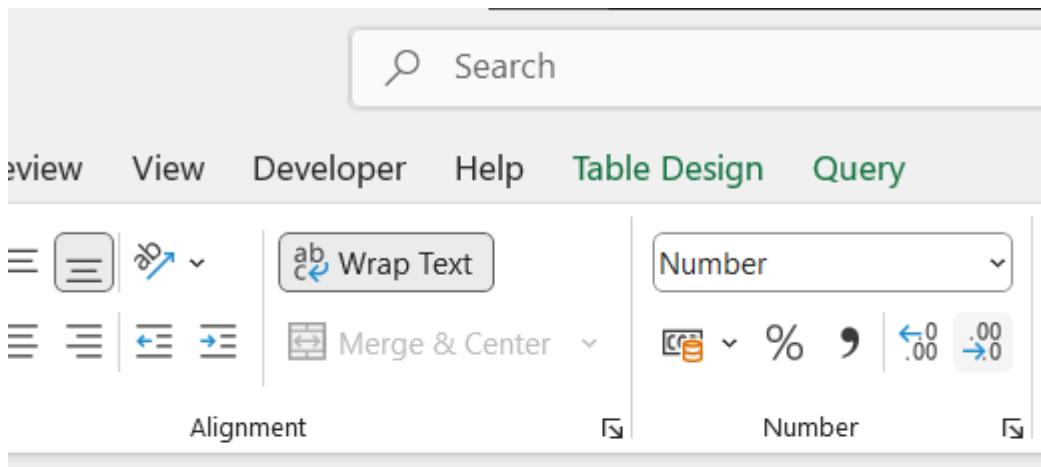
Category: General Number Currency Accounting Date Time Percentage Fraction Scientific Text Special Custom

Type: 0 General 0.00 #,##0 #,##0.00 #,##0;-#,##0 #,##0;[Red]#,##0 #,##0.00;-#,##0.00 #,##0.00;[Red]#,##0.00 #,##0;[Red]#,##0 #,##0.00;-#,##0 #,##0;[Red]#,##0.00 #,##0;[Red]#,##0

Sample: Quantity

Type the number format code, using one of the existing codes as a starting point.

OK Cancel



E	F	G	H	I	J
uct	Quantity	Unit Price	Cost Price	Date	
Bag	17	444	333.47	09-11-2024	
Bag	20	959.42	714.76	06-09-2024	
Bag	19	304.09	218.42	06-12-2024	
	8	811.75	592.98	16-09-2024	
	5	612.12	539.4	18-11-2024	
	20	487.02	308.54	21-03-2024	
otor	15	662.12	585.33	03-07-2024	

b) Unit Price Column

1. Select the Unit Price column.
2. Go to Home → Number Format → More Number Formats.
3. Choose Number category.
4. Set Decimal places to 2.
5. Click OK

Font Alignment Number

Unit Price

Representative	Region	Department	Product	Quantity	Unit Price	
	West	Clothing	Rice Bag	17	9	
	West	Electronics	Rice Bag	20	9	
	North	Electronics	Rice Bag	19	3	
	North	Clothing	Table	8	8	
	North	Electronics	Shirt	5	6	
	North	Furniture	Table	20	4	
	South	Clothing	Monitor	15	6	
	North	Electronics	Monitor	10	8	
	West	Furniture	Table	3	6	
	East	Groceries	Rice Bag	19	6	
	East	Clothing	Table	16	5	
	East	Clothing	Rice Bag	10	5	
	West	Furniture	Monitor	14	1	
	West	Furniture	Jeans	6	1	
	South	Unknown	Chair	15	6	
	Unknown	Clothing	TV	17	6	
	South	Groceries	Monitor	5	5	
	North	Furniture	Shirt	18	2	
	South	Furniture	Jeans	13		
	West	Furniture	Shirt	16	988.71	683.75
	West	Electronics	Table	11	861.09	529.08
						24-05-2024
						29-04-2024

Unit Price

Representative	Region	Department	Product	Quantity	Unit Price	Cost Price	Date
	West	Clothing	Rice Bag	17	444	333.47	09-11-2024
	West	Electronics					
	North	Electronics					
	North	Clothing					
	North	Electronics					
	North	Furniture					
	South	Clothing					
	North	Electronics					
	West	Furniture					
	East	Groceries					
	East	Clothing					
	East	Clothing					
	West	Furniture					
	West	Furniture					
	South	Unknown					
	Unknown	Clothing					
	South	Groceries					
	North	Furniture					
	South	Furniture					
	West	Furniture					
	West	Electronics					
	East	Clothing					
	North	Clothing					
	South	Groceries					
	West	Electronics					
	East	Clothing					

Format Cells

Number Alignment Font Border Fill Protection

Category: Custom

Type: 0.00

Sample: Unit Price

OK Cancel

	Wrap Text	Number		
	Merge & Center	%		
gnment		Number		Condition Formatting

	G	H	I	J	K
y	Unit Price	Cost Price	Date		
17	444.00	333.47	09-11-2024		
20	959.42	714.76	06-09-2024		
19	304.09	218.42	06-12-2024		
8	811.75	592.98	16-09-2024		
5	612.12	539.4	18-11-2024		
20	487.02	308.54	21-03-2024		
15	662.12	585.33	03-07-2024		
10	876.45	724.51	22-11-2024		
3	640.05	472.53	07-07-2024		
19	626.08	473.48	29-11-2024		
16	548.62	391	11-01-2024		
10	501.72	421.35	04-01-2024		
14	193.17	126.61	11-09-2024		
6	150.38	106.31	28-11-2024		
15	632.45	468.12	23-04-2024		
17	697.88	460.35	27-03-2024		
5	525.79	431.94	22-07-2024		
18	292.53	256.11	25-08-2024		
13	240.90	199.91	01-03-2024		
16	988.71	683.75	24-05-2024		
11	861.09	529.08	29-04-2024		
18	962.59	722.69	16-07-2024		
14	810.27	602.29	01-11-2024		
12	253.28	166.3	10-08-2024		
11	713.78	439.58	18-08-2024		

c) Cost Price Column

1. Select the Cost Price column.
2. Go to Home → Number Format → More Number Formats.
3. Choose Number category.
4. Set Decimal places to 2.
5. Click OK.

The screenshot shows the Microsoft Excel ribbon with the 'Table Design' tab selected. Below the ribbon, the 'Home' tab is active, specifically the 'Number' group. The 'General' dropdown is open, and the decimal separator dropdown shows a comma (','). A 'Number' button is located at the bottom right of the group.

G	H	I	J	K	L
Unit Price	Cost Price	Date			
444.00	333.47	09-11-2024			
959.42	714.76	06-09-2024			
304.09	218.42	06-12-2024			
811.75	592.98	16-09-2024			
612.12	539.4	18-11-2024			
487.02	308.54	21-03-2024			
662.12	585.33	03-07-2024			
876.45	724.51	22-11-2024			
640.05	472.53	07-07-2024			
626.08	473.48	29-11-2024			
548.62	391	11-01-2024			
501.72	421.35	04-01-2024			
193.17	126.61	11-09-2024			
150.38	106.31	28-11-2024			
632.45	468.12	23-04-2024			

Cost Price

Category	Region	Department	Product	Quantity	Unit Price	Cost Price	Date
West	Clothing	Rice Bag		17	444.00		
West	Electronics	Rice Bag		20	959.42		
North	Electronics	Rice Bag		19	304.09		
North	Clothing	Table		8	811.75		
North	Electronics	Shirt		5	612.12		
North	Furniture	Table		20	487.02		
South	Clothing	Monitor		15	662.12		
North	Electronics	Monitor		10	876.45		
West	Furniture	Table		3	640.05		
East	Groceries	Rice Bag		19	626.08		
East	Clothing	Table		16	548.62		
East	Clothing	Rice Bag		10	501.72		
West	Furniture	Monitor		14	193.17		
West	Furniture	Jeans		6	150.38		
South	Unknown	Chair		15	632.45		
Unknown	Clothing	TV		17	697.88		
South	Groceries	Monitor		5	525.79		
North	Furniture	Shirt		18	292.53		
South	Furniture	Jeans		13	240.90		
West	Furniture	Shirt		16	988.71		
West	Electronics	Table		11	861.09	529.08	29-04-2024
East	Clothing	Jeans		18	962.59	722.69	16-07-2024
North	Clothing	Monitor		14	810.27	602.29	01-11-2024
South	Groceries	TV		12	253.28	166.3	10-08-2024

Quantity Unit Price Cost Price Date

17	444.00	333.47	09-11-2024
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Format Cells

Number Alignment Font Border Fill Protection

Category: General

Sample: Cost Price

Type: 0.00

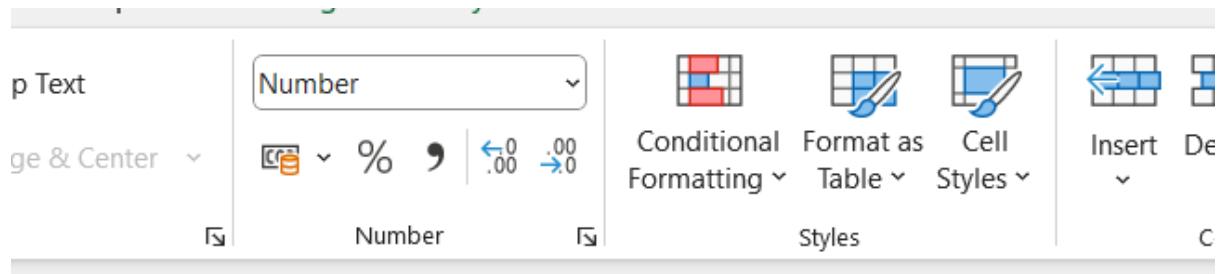
0.00

#,##0
#,##0.00
#,##0;#,##0
#,##0;(Red) #,##0
#,##0.00;#,##0.00
#,##0.00;(Red) #,##0.00
₹ #,##0;₹ -#,##0
₹ #,##0;(Red) ₹ -#,##0
₹ #,##0.00;₹ -#,##0.00

Delete

Type the number format code, using one of the existing codes as a starting point.

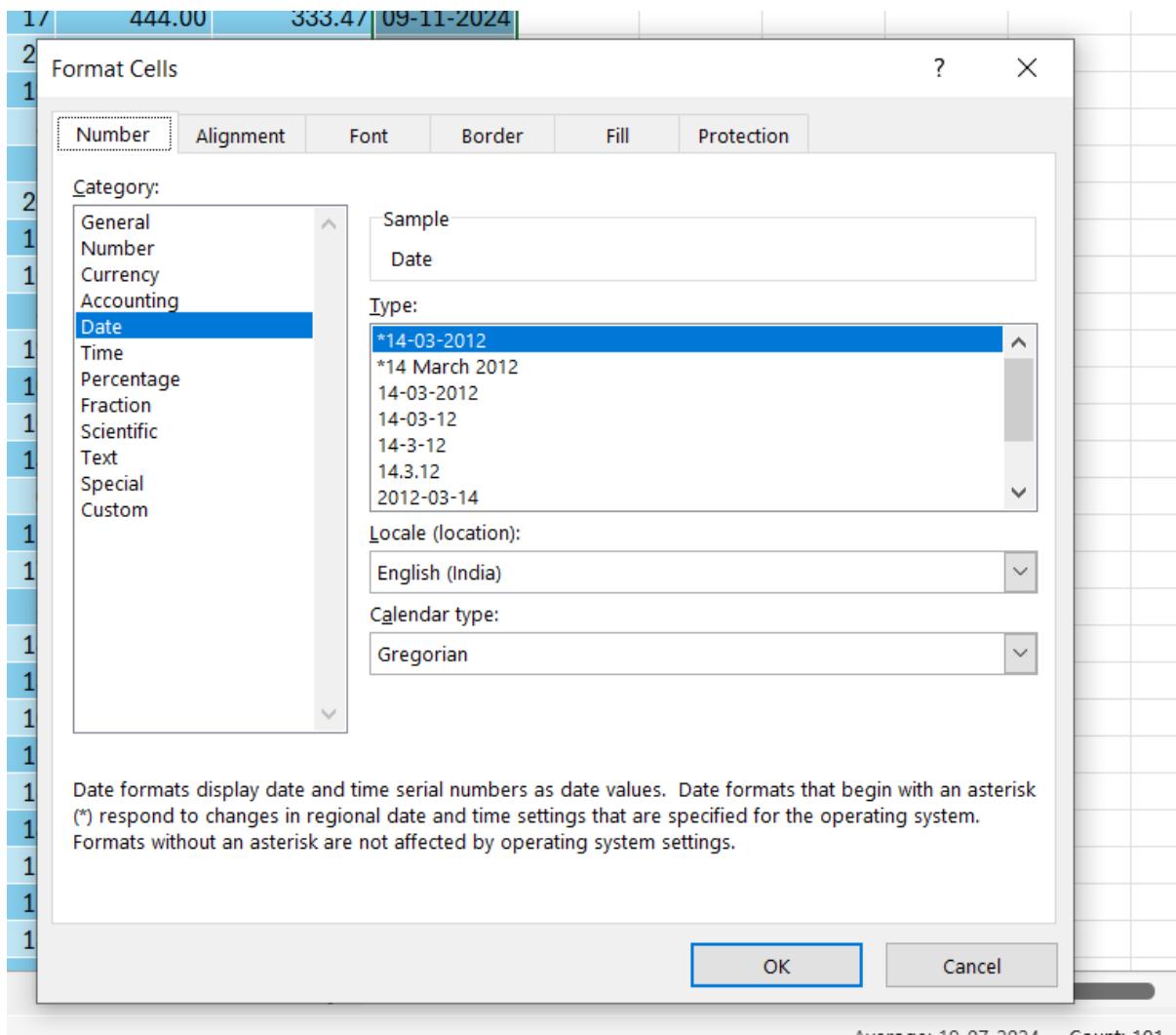
OK Cancel



G	H	I	J	K	L	M	N
Price	Cost Price	Date					
444.00	333.47	09-11-2024					
959.42	714.76	06-09-2024					
304.09	218.42	06-12-2024					
311.75	592.98	16-09-2024					
612.12	539.40	18-11-2024					
487.02	308.54	21-03-2024					
662.12	585.33	03-07-2024					
376.45	724.51	22-11-2024					
640.05	472.53	07-07-2024					
626.08	473.48	29-11-2024					
548.62	391.00	11-01-2024					
501.72	421.35	04-01-2024					
193.17	126.61	11-09-2024					
150.38	106.31	28-11-2024					
632.45	468.12	23-04-2024					
697.88	460.35	27-03-2024					
525.79	431.94	22-07-2024					
292.53	256.11	25-08-2024					
240.90	199.91	01-03-2024					
988.71	683.75	24-05-2024					
361.09	529.08	29-04-2024					
962.59	722.69	16-07-2024					

d) Date Column

1. Select the Date column.
2. Go to Home → Number Format dropdown.
3. Select Date.

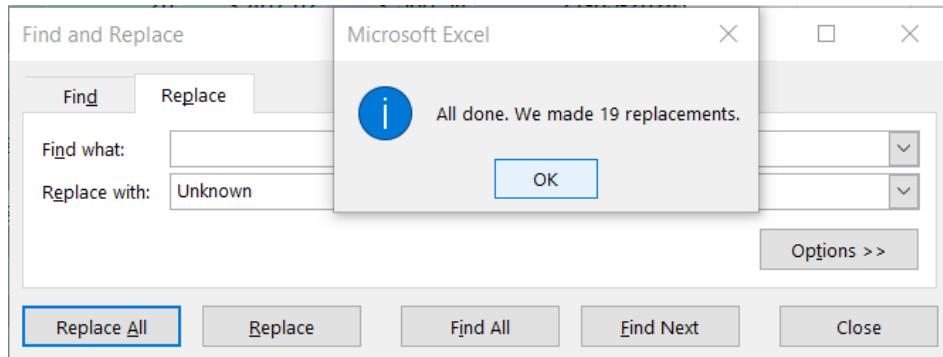


	A	B	C	D	E	F	G	H	I
1	Client	Client Representative	Region	Department	Product	Quantity	Unit Price	Cost Price	Date
2	Delta Co	Mary Jones	West	Clothing	Rice Bag	17	444.00	333.47	09-11-2024
3	Beta Ltd	Priya Kumar	West	Electronics	Rice Bag	20	959.42	714.76	06-09-2024
4	Alpha Corp	Priya Kumar	North	Electronics	Rice Bag	19	304.09	218.42	06-12-2024
5	Epsilon LLC	Alex Lee	North	Clothing	Table	8	811.75	592.98	16-09-2024
6	Gamma Inc	John Smith	North	Electronics	Shirt	5	612.12	539.40	18-11-2024
7	Epsilon LLC	Alex Lee	North	Furniture	Table	20	487.02	308.54	21-03-2024
8	Gamma Inc	Priya Kumar	South	Clothing	Monitor	15	662.12	585.33	03-07-2024
9	Alpha Corp	Mary Jones	North	Electronics	Monitor	10	876.45	724.51	22-11-2024
10	Beta Ltd	John Smith	West	Furniture	Table	3	640.05	472.53	07-07-2024
11	Epsilon LLC	Priya Kumar	East	Groceries	Rice Bag	19	626.08	473.48	29-11-2024
12	Gamma Inc	David Chen	East	Clothing	Table	16	548.62	391.00	11-01-2024
13	Epsilon LLC	John Smith	East	Clothing	Rice Bag	10	501.72	421.35	04-01-2024
14	Beta Ltd	Alex Lee	West	Furniture	Monitor	14	193.17	126.61	11-09-2024
15	Epsilon LLC	Priya Kumar	West	Furniture	Jeans	6	150.38	106.31	28-11-2024
16	Alpha Corp	Mary Jones	South		Chair	15	632.45	468.12	23-04-2024
17	Gamma Inc	Alex Lee		Clothing	TV	17	697.88	480.35	27-03-2024
18	Beta Ltd	John Smith	South	Groceries	Monitor	5	525.79	431.94	22-07-2024
19	Beta Ltd	Alex Lee	North	Furniture	Shirt	18	292.53	256.11	25-08-2024
20	Epsilon LLC	David Chen	South	Furniture	Jeans	13	240.90	199.91	01-03-2024
21	Epsilon LLC	David Chen	West	Furniture	Shirt	16	988.71	683.75	24-05-2024
22	Gamma Inc	Mary Jones	West	Electronics	Table	11	861.09	529.08	29-04-2024
23	Gamma Inc	John Smith	East	Clothing	Jeans	18	962.59	722.69	16-07-2024
24	Delta Co	David Chen	North	Clothing	Monitor	14	810.27	602.29	01-11-2024
25	Alpha Corp	Priya Kumar	South	Groceries	TV	12	253.28	166.30	10-08-2024
26	Delta Co	Mary Jones	West	Electronics	Jeans	11	713.78	439.58	18-08-2024
27	Alpha Corp	Alex Lee	East	Clothing	Jeans	13	726.72	545.23	18-02-2024
28	Epsilon LLC	Priya Kumar	North	Electronics	Shirt	1	466.34	384.36	16-04-2024

Step 4: Handle Blank and Duplicate Data

a) Replace Blank Cells

1. Select the entire dataset (Ctrl + A).
2. Go to Home → Find & Select → Replace.
3. blanks with “Unknown”.



	A	B	C	D	E	F	G	H	I
1	Client	Client Rep	Region	Department	Product	Quantity	Unit Price	Cost Price	Date
2	Delta Co	Mary Jones	West	Clothing	Rice Bag	17	444.00	333.47	09-11-2024
3	Beta Ltd	Priya Kumar	West	Electronics	Rice Bag	20	959.42	714.76	06-09-2024
4	Alpha Corp	Priya Kumar	North	Electronics	Rice Bag	19	304.09	218.42	06-12-2024
5	Epsilon LLC	Alex Lee	North	Clothing	Table	8	811.75	592.98	16-09-2024
6	Gamma Inc	John Smith	North	Electronics	Shirt	5	612.12	539.40	18-11-2024
7	Epsilon LLC	Alex Lee	North	Furniture	Table	20	487.02	308.54	21-03-2024
8	Gamma Inc	Priya Kumar	South	Clothing	Monitor	15	662.12	585.33	03-07-2024
9	Alpha Corp	Mary Jones	North	Electronics	Monitor	10	876.45	724.51	22-11-2024
10	Beta Ltd	John Smith	West	Furniture	Table	3	640.05	472.53	07-07-2024
11	Epsilon LLC	Priya Kumar	East	Groceries	Rice Bag	19	626.08	473.48	29-11-2024
12	Gamma Inc	David Chen	East	Clothing	Table	16	548.62	391.00	11-01-2024
13	Epsilon LLC	John Smith	East	Clothing	Rice Bag	10	501.72	421.35	04-01-2024
14	Beta Ltd	Alex Lee	West	Furniture	Monitor	14	193.17	126.61	11-09-2024
15	Epsilon LLC	Priya Kumar	West	Furniture	Jeans	6	150.38	106.31	28-11-2024
16	Alpha Corp	Mary Jones	South	Unknown	Chair	15	632.45	468.12	23-04-2024
17	Gamma Inc	Alex Lee	Unknown	Clothing	TV	17	697.88	460.35	27-03-2024
18	Beta Ltd	John Smith	South	Groceries	Monitor	5	525.79	431.94	22-07-2024
19	Beta Ltd	Alex Lee	North	Furniture	Shirt	18	292.53	256.11	25-08-2024
20	Epsilon LLC	David Chen	South	Furniture	Jeans	13	240.90	199.91	01-03-2024
21	Epsilon LLC	David Chen	West	Furniture	Shirt	16	988.71	683.75	24-05-2024
22	Gamma Inc	Mary Jones	West	Electronics	Table	11	861.09	529.08	29-04-2024
23	Gamma Inc	John Smith	East	Clothing	Jeans	18	962.59	722.69	16-07-2024
24	Delta Co	David Chen	North	Clothing	Monitor	14	810.27	602.29	01-11-2024
25	Alpha Corp	Priya Kumar	South	Groceries	TV	12	253.28	166.30	10-08-2024
26	Delta Co	Mary Jones	West	Electronics	Jeans	11	713.78	439.58	18-08-2024

b) Remove Duplicates

1. Select the entire table.
2. Go to Data → Remove Duplicates.
3. Check all columns and click OK.

The image consists of two screenshots of Microsoft Excel. The top screenshot shows the ribbon with the 'Data' tab selected. In the 'Data Tools' group, the 'Text to Columns' icon is highlighted with a blue arrow. The bottom screenshot shows a table on the 'Sales_Data' sheet. The 'Remove Duplicates' dialog box is open over the table, with the 'Select All' button checked and 'My data has headers' checked. All columns in the table are selected in the 'Columns' list.

A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Client	Client Representative	Region	Department	Product	Quantity	Unit Price	Cost Price	Date				
2	Delta Co	Mary Jones	West	Clothing	Rice Bag	17	444	333.47	09-11-2024				
3	Beta Ltd	Priya Kumar	West	Electronics	Rice Bag	20	959.42	714.76	06-09-2024				
4	Alpha Corp	Priya Kumar	North	Electronics	Rice Bag	18							
5	Epsilon LLC	Alex Lee	North	Clothing	Table	8							
6	Gamma Inc	John Smith	North	Electronics	Shirt	5							
7	Epsilon LLC	Alex Lee	north	Furniture	Table	20							
8	Gamma Inc	Priya Kumar	South	Clothing	Monitor	15							
9	Alpha Corp	Mary Jones	North	Electronics	Monitor	10							
10	Beta Ltd	John Smith	West	Furniture	Table	3							
11	Epsilon LLC	Priya Kumar	East	Groceries	Rice Bag	19							
12	Gamma Inc	David Chen	East	Clothing	Table	16							
13	Epsilon LLC	John Smith	East	Clothing	Rice Bag	10							
14	Beta Ltd	Alex Lee	West	furniture	Monitor	14							
15	Epsilon LLC	Priya Kumar	West	Furniture	Jeans	6							
16	Alpha Corp	Mary Jones	South		Chair	15							
17	Gamma Inc	Alex Lee		Clothing	TV	17							
18	Beta Ltd	John Smith	South	Groceries	Monitor	5							
19	Beta Ltd	Alex Lee	North	Furniture	Shirt	18	292.53	256.11	25-08-2024				
20	Epsilon LLC	David Chen	South	Furniture	Jeans	13	240.9	199.91	01-03-2024				
21	Epsilon LLC	David Chen	West	Furniture	Shirt	16	988.71	683.75	24-05-2024				
22	Gamma Inc	mary.jones	West	Electronics	Table	11	861.09	529.08	29-04-2024				
23	Gamma Inc	John Smith	East	Clothing	Jeans	18	962.59	722.69	16-07-2024				
24	Delta Co	David Chen	North	Clothing	Monitor	14	810.27	602.29	01-11-2024				
25	Alpha Corp	Priya Kumar	South	Groceries	TV	12	253.28	166.3	10-08-2024				
26	Delta Co	Mary Jones	West	Electronics	Jeans	11	713.78	439.58	18-08-2024				
27	ALPHA CORP	Alex Lee	East	Clothing	Jeans	13	726.72	545.23	18-02-2024				

Book1 - Excel

File Home Insert Draw Page Layout Formulas Data Review View Developer Help Table Design Query

From Text/CSV From Web Existing Connections Refresh Properties Workbook Links All Sort Filter Advanced Data Types Text to Columns What-If Analysis Forecast Sheet Group Ungroup Subtotal Outline Analysis

Get & Transform Data Delta Co

Sales_Data Sheet1

OK

3 duplicate values found and removed: 100 unique values remain. Note that counts may include empty cells, spaces, etc.

Queries & Connections

Queries | Connections
1 query
Sales_Data 103 rows loaded.

1 Client Client Representative Region Department Product Quantity Unit Price Cost Price Date

2 Delta Co Mary Jones West Clothing Rice Bag 17 444 333.47 09-11-2024

3 Beta Ltd Priya Kumar West Electronics Rice Bag 20 959.42 714.76 06-09-2024

4 Alpha Corp Priya Kumar North Electronics Rice Bag 19 304.09 218.42 06-12-2024

5 Epsilon LLC Alex Lee North Clothing Table 8 811.75 592.98 16-09-2024

6 Gamma Inc John Smith North Electronics Shirt 5 612.12 539.4 18-11-2024

7 Epsilon LLC Alex Lee North Furniture Table 20 487.02 398.64 31-03-2024

8 Gamma Inc Priya Kumar South Clothing Monitor Microsoft Excel

9 Alpha Corp Mary Jones North Electronics Monitor

10 Beta Ltd John Smith West Furniture Table

11 Epsilon LLC Priya Kumar East Groceries Rice Bag

12 Gamma Inc David Chen East Clothing Table

13 Epsilon LLC John Smith East Clothing Rice Bag

14 Beta Ltd Alex Lee West Furniture Monitor 14 193.17 126.61 11-09-2024

15 Epsilon LLC Priya Kumar West Furniture Jeans 6 150.38 106.31 28-11-2024

16 Alpha Corp Mary Jones South Chair 15 632.45 468.12 23-04-2024

17 Gamma Inc Alex Lee Clothing TV 17 697.88 460.35 27-03-2024

18 Beta Ltd John Smith South Groceries Monitor 5 525.79 431.94 22-07-2024

19 Beta Ltd Alex Lee North Furniture Shirt 18 292.53 256.11 25-08-2024

20 Epsilon LLC David Chen South Furniture Jeans 13 240.9 199.91 01-03-2024

21 Epsilon LLC David Chen West Furniture Shirt 16 988.71 683.75 24-05-2024

22 Gamma Inc maryjones West Electronics Table 11 861.09 529.08 29-04-2024

23 Gamma Inc John Smith East Clothing Jeans 18 962.59 722.69 16-07-2024

24 Delta Co David Chen North Clothing Monitor 14 810.27 602.29 01-11-2024

25 Alpha Corp Priya Kumar South Groceries TV 12 253.28 165.3 10-08-2024

26 Delta Co Mary Jones West Electronics Jeans 11 713.78 439.58 18-08-2024

27 ALPHA CORP Alex Lee East Clothing Jeans 13 726.72 545.23 18-02-2024

Step 5: Clean Text Columns

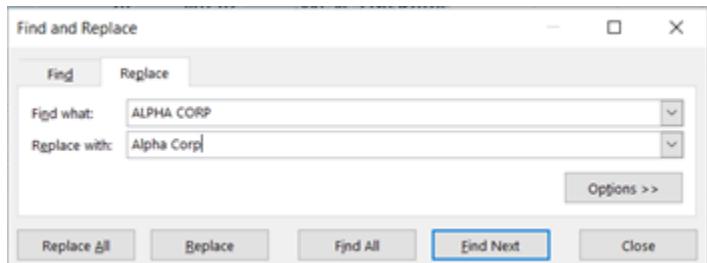
Client Column

"ALPHA CORP" → "Alpha Corp"

1. Go to Home → Find & Select → Replace
2. Find = "ALPHA CORP" and Replace = "Alpha Corp".

The screenshot shows a Microsoft Excel spreadsheet with a list of clients in column A. The first row is labeled "Client". The list includes: Delta Co, Beta Ltd, Alpha Corp, Epsilon LLC, Gamma Inc, Epsilon LLC, Gamma Inc, Alpha Corp, Beta Ltd, Epsilon LLC, Gamma Inc, Epsilon LLC, Beta Ltd, Epsilon LLC, Alpha Corp, Gamma Inc, Beta Ltd, Beta Ltd, Epsilon LLC, Epsilon LLC, Gamma Inc, Gamma Inc, Delta Co, Alpha Corp, Delta Co, and ALPHA CORP. The cell containing "ALPHA CORP" is highlighted with a green border. To the right of the spreadsheet is the ribbon bar, specifically the "Editing" tab which is selected. A dropdown menu is open under the "Find & Select" button, showing options: Find..., Replace..., Go To..., Go To Special..., Formulas, Comments, Conditional Formatting, Constants, Data Validation, Select Objects, and Selection Pane... The "Replace..." option is highlighted.

Client
Delta Co
Beta Ltd
Alpha Corp
Epsilon LLC
Gamma Inc
Epsilon LLC
Gamma Inc
Alpha Corp
Beta Ltd
Epsilon LLC
Gamma Inc
Epsilon LLC
Beta Ltd
Epsilon LLC
Alpha Corp
Gamma Inc
Beta Ltd
Beta Ltd
Epsilon LLC
Epsilon LLC
Gamma Inc
Gamma Inc
Delta Co
Alpha Corp
Delta Co
ALPHA CORP



	A
1	Client
2	Delta Co
3	Beta Ltd
4	Alpha Corp
5	Epsilon LLC
6	Gamma Inc
7	Epsilon LLC
8	Gamma Inc
9	Alpha Corp
10	Beta Ltd
11	Epsilon LLC
12	Gamma Inc
13	Epsilon LLC
14	Beta Ltd
15	Epsilon LLC
16	Alpha Corp
17	Gamma Inc
18	Beta Ltd
19	Beta Ltd
20	Epsilon LLC
21	Epsilon LLC
22	Gamma Inc
23	Gamma Inc
24	Delta Co
25	Alpha Corp
26	Delta Co
27	Alpha Corp
28	Epsilon LLC

Client Representative Column

- "mary jones" → "Mary Jones"

1. Create a new column beside Client Representative.

A	B	C	D	E	F	
1	Client	Client Representative	New Client Representative	Region	Department	Product
2	Delta Co	Mary Jones		West	Clothing	Rice Bag
3	Beta Ltd	Priya Kumar		West	Electronics	Rice Bag
4	Alpha Corp	Priya Kumar		North	Electronics	Rice Bag
5	Epsilon LLC	Alex Lee		North	Clothing	Table
6	Gamma Inc	John Smith		North	Electronics	Shirt
7	Epsilon LLC	Alex Lee		north	Furniture	Table
8	Gamma Inc	Priya Kumar		South	Clothing	Monitor
9	Alpha Corp	Mary Jones		North	Electronics	Monitor
10	Beta Ltd	John Smith		West	Furniture	Table
11	Epsilon LLC	Priya Kumar		East	Groceries	Rice Bag
12	Gamma Inc	David Chen		East	Clothing	Table
13	Epsilon LLC	John Smith		East	Clothing	Rice Bag
14	Beta Ltd	Alex Lee		West	furniture	Monitor

2. Enter the formula:

= TRIM (PROPER ([@Client Representative]))

A	B	C	D	E	
1	Client	Client Representative	New Client Representative	Region	Department
2	Delta Co	Mary Jones	=TRIM(Proper([@Client Representative]))		
3	Beta Ltd	Priya Kumar		West	Electronics
4	Alpha Corp	Priya Kumar		North	Electronics
5	Epsilon LLC	Alex Lee		North	Clothing
6	Gamma Inc	John Smith		North	Electronics
7	Epsilon LLC	Alex Lee		north	Furniture
8	Gamma Inc	Priya Kumar		South	Clothing

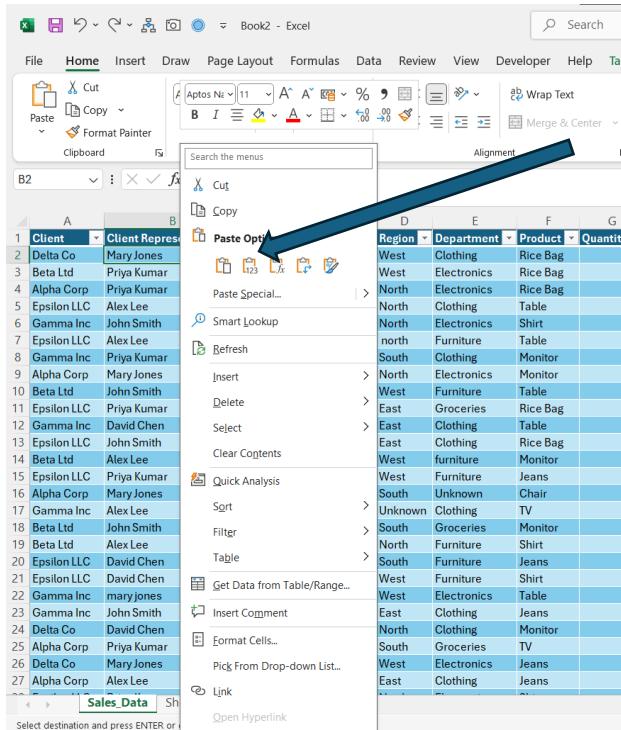
Client Representative	New Client Representative
Mary Jones	Mary Jones
Priya Kumar	Priya Kumar
Priya Kumar	Priya Kumar
Alex Lee	Alex Lee
John Smith	John Smith
Alex Lee	Alex Lee
Priya Kumar	Priya Kumar
Mary Jones	Mary Jones
John Smith	John Smith
Priya Kumar	Priya Kumar
David Chen	David Chen
John Smith	John Smith
Alex Lee	Alex Lee
Priya Kumar	Priya Kumar
Mary Jones	Mary Jones
Alex Lee	Alex Lee
John Smith	John Smith
Alex Lee	Alex Lee
David Chen	David Chen
David Chen	David Chen
mary jones	Mary Jones
John Smith	John Smith
David Chen	David Chen
Priya Kumar	Priya Kumar
Mary Jones	Mary Jones
Alex Lee	Alex Lee

3. Copy the new column's values.

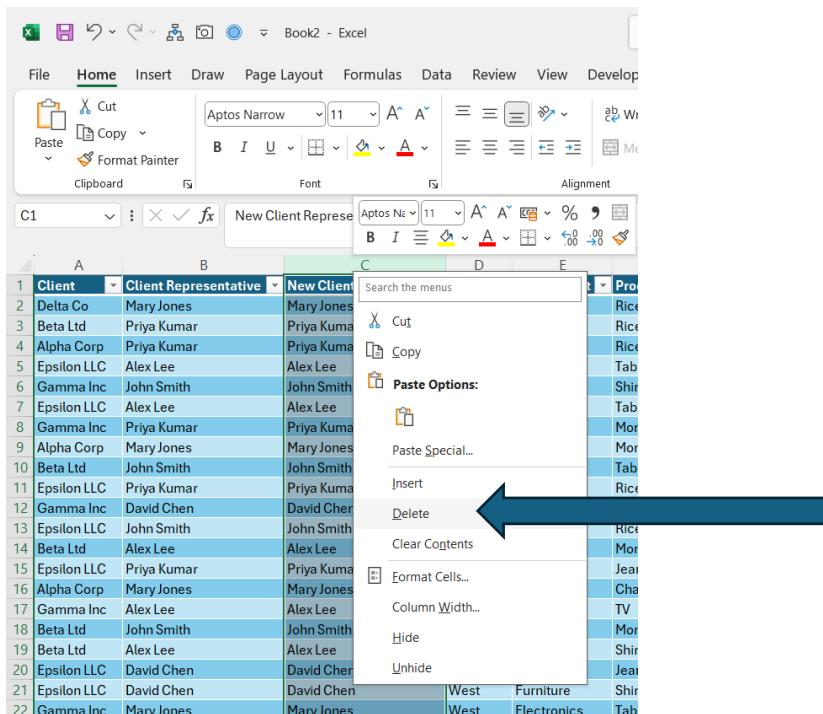
The screenshot shows a Microsoft Excel spreadsheet titled "Book2 - Excel". The ribbon menu is visible at the top, and the formula bar shows the formula =PROPER([@[Client Representative]]). The table has columns labeled Client, Client Representative, New Client Representative, Region, Department, Product, Quantity, and Unit. The "New Client Representative" column contains the corrected values from the previous table. The "Client Representative" column contains the original values. The "Region", "Department", "Product", "Quantity", and "Unit" columns contain various product details and quantities. The "Client" column lists company names like Delta Co, Beta Ltd, Alpha Corp, etc. The "New Client Representative" column lists names like Mary Jones, Priya Kumar, John Smith, etc.

Client	Client Representative	New Client Representative	Region	Department	Product	Quantity	Unit
Delta Co	Mary Jones	Mary Jones	West	Clothing	Rice Bag	17	
Beta Ltd	Priya Kumar	Priya Kumar	East	Electronics	Rice Bag	20	
Alpha Corp	Priya Kumar	Priya Kumar	North	Electronics	Rice Bag	19	
Epsilon LLC	Alex Lee	Alex Lee	North	Clothing	Table	8	
Gamma Inc	John Smith	John Smith	North	Electronics	Shirt	5	
Epsilon LLC	Alex Lee	Alex Lee	north	Furniture	Table	20	
Gamma Inc	Priya Kumar	Priya Kumar	South	Clothing	Monitor	15	
Beta Ltd	Mary Jones	Mary Jones	North	Electronics	Monitor	10	
Beta Ltd	John Smith	John Smith	West	Furniture	Table	3	
Epsilon LLC	Priya Kumar	Priya Kumar	East	Groceries	Rice Bag	19	
Gamma Inc	David Chen	David Chen	East	Clothing	Table	16	
Epsilon LLC	John Smith	John Smith	East	Clothing	Rice Bag	10	
Beta Ltd	Alex Lee	Alex Lee	West	furniture	Monitor	14	
Epsilon LLC	Priya Kumar	Priya Kumar	West	Furniture	Jeans	6	
Alpha Corp	Mary Jones	Mary Jones	South	Unknown	Chair	15	
Gamma Inc	Alex Lee	Alex Lee	Unknown	Clothing	TV	17	
Beta Ltd	John Smith	John Smith	South	Groceries	Monitor	5	
Beta Ltd	Alex Lee	Alex Lee	North	Furniture	Shirt	18	
Epsilon LLC	David Chen	David Chen	South	Furniture	Jeans	13	
Epsilon LLC	David Chen	David Chen	West	Furniture	Shirt	16	
Gamma Inc	mary jones	Mary Jones	West	Electronics	Table	11	
Gamma Inc	John Smith	John Smith	East	Clothing	Jeans	18	
Delta Co	David Chen	David Chen	North	Clothing	Monitor	14	
Alpha Corp	Priya Kumar	Priya Kumar	South	Groceries	TV	12	
Delta Co	Mary Jones	Mary Jones	West	Electronics	Jeans	11	
Alpha Corp	Alex Lee	Alex Lee	East	Clothing	Jeans	13	

4. Right-click the original column → Paste as Values.



5. Delete the temporary helper column.

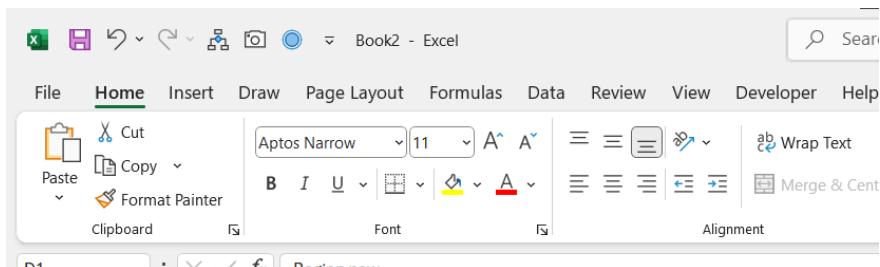


A	B	C	D	E	F	G	
1	Client	Client Representative	Region	Department	Product	Quantity	Unit
2	Delta Co	Mary Jones	West	Clothing	Rice Bag	17	
3	Beta Ltd	Priya Kumar	West	Electronics	Rice Bag	20	
4	Alpha Corp	Priya Kumar	North	Electronics	Rice Bag	19	
5	Epsilon LLC	Alex Lee	North	Clothing	Table	8	
6	Gamma Inc	John Smith	North	Electronics	Shirt	5	
7	Epsilon LLC	Alex Lee	north	Furniture	Table	20	
8	Gamma Inc	Priya Kumar	South	Clothing	Monitor	15	
9	Alpha Corp	Mary Jones	North	Electronics	Monitor	10	
10	Beta Ltd	John Smith	West	Furniture	Table	3	
11	Epsilon LLC	Priya Kumar	East	Groceries	Rice Bag	19	
12	Gamma Inc	David Chen	East	Clothing	Table	16	
13	Epsilon LLC	John Smith	East	Clothing	Rice Bag	10	
14	Beta Ltd	Alex Lee	West	furniture	Monitor	14	
15	Epsilon LLC	Priya Kumar	West	Furniture	Jeans	6	
16	Alpha Corp	Mary Jones	South	Unknown	Chair	15	
17	Gamma Inc	Alex Lee	Unknown	Clothing	TV	17	
18	Beta Ltd	John Smith	South	Groceries	Monitor	5	
19	Beta Ltd	Alex Lee	North	Furniture	Shirt	18	
20	Epsilon LLC	David Chen	South	Furniture	Jeans	13	
21	Epsilon LLC	David Chen	West	Furniture	Shirt	16	
22	Gamma Inc	Mary Jones	West	Electronics	Table	11	
23	Gamma Inc	John Smith	East	Clothing	Jeans	18	
24	Delta Co	David Chen	North	Clothing	Monitor	14	
25	Alpha Corp	Priya Kumar	South	Groceries	TV	12	
26	Delta Co	Mary Jones	West	Electronics	Jeans	11	

Region Column

- " north " → "North"

1. Create a new column beside Region.



The screenshot shows a Microsoft Excel interface with the 'Home' tab selected. A table is displayed on the screen with columns labeled A through G. A new column, 'Region new', has been inserted between the original 'Region' column and the 'Department' column. The data in the table includes various company names, representative names, regions, products, quantities, and units. The 'Region new' column contains values like 'West', 'North', 'north', etc., corresponding to the 'Region' column values.

A	B	C	D	E	F	G		
1	Client	Client Representative	Region	Region new	Department	Product	Quantity	Unit
2	Delta Co	Mary Jones	West		Clothing	Rice Bag	17	
3	Beta Ltd	Priya Kumar	West		Electronics	Rice Bag	20	
4	Alpha Corp	Priya Kumar	North		Electronics	Rice Bag	19	
5	Epsilon LLC	Alex Lee	North		Clothing	Table	8	
6	Gamma Inc	John Smith	North		Electronics	Shirt	5	
7	Epsilon LLC	Alex Lee	north		Furniture	Table	20	
8	Gamma Inc	Priya Kumar	South		Clothing	Monitor	15	
9	Alpha Corp	Mary Jones	North		Electronics	Monitor	10	
10	Beta Ltd	John Smith	West		Furniture	Table	3	
11	Epsilon LLC	Priya Kumar	East		Groceries	Rice Bag	19	
12	Gamma Inc	David Chen	East		Clothing	Table	16	
13	Epsilon LLC	John Smith	East		Clothing	Rice Bag	10	
14	Beta Ltd	Alex Lee	West		furniture	Monitor	14	
15	Epsilon LLC	Priya Kumar	West		Furniture	Jeans	6	

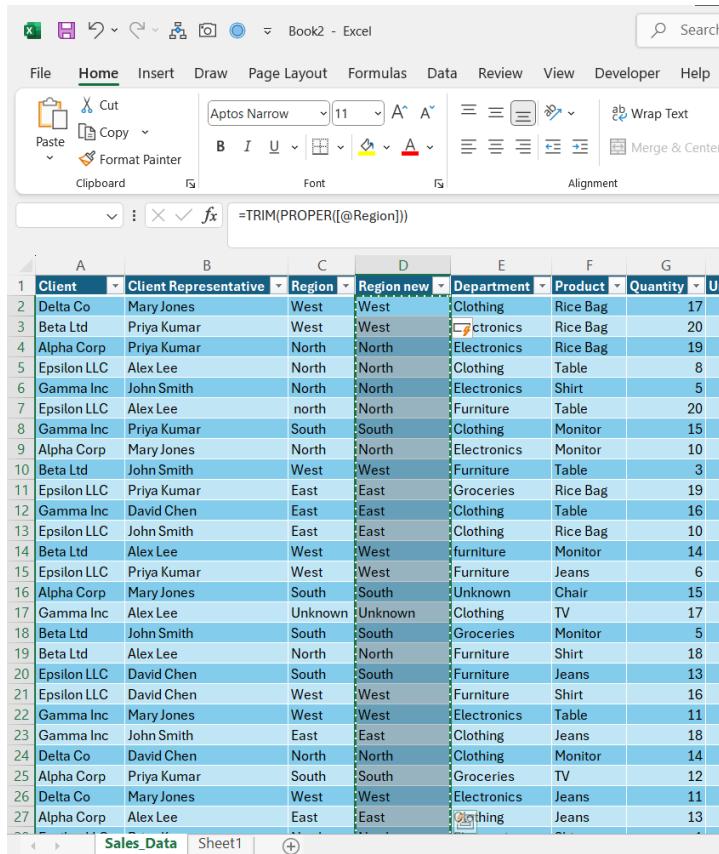
2. Enter the formula:

=TRIM(Proper([@Region]))

	C	D	E	F
ative	Region	Region new	Department	Product
	West	=TRIM(Proper([@Region]))	Rice Bag	
	West		Electronics	Rice Bag
	North		Electronics	Rice Bag
	North		Clothing	Table
	North		Electronics	Shirt
	north		Furniture	Table
	South		Clothing	Monitor
	North		Electronics	Monitor
	West		Furniture	Table
	East		Groceries	Rice Bag
	East		Clothing	Table
	East		Clothing	Rice Bag
	West		furniture	Monitor
	West		Furniture	Jeans
	South		Unknown	Chair
	Unknown		Clothing	TV

C	D
Region	Region new
West	West
West	West
North	North
South	South
North	North
West	West
East	East
East	East
East	East
West	West
West	West

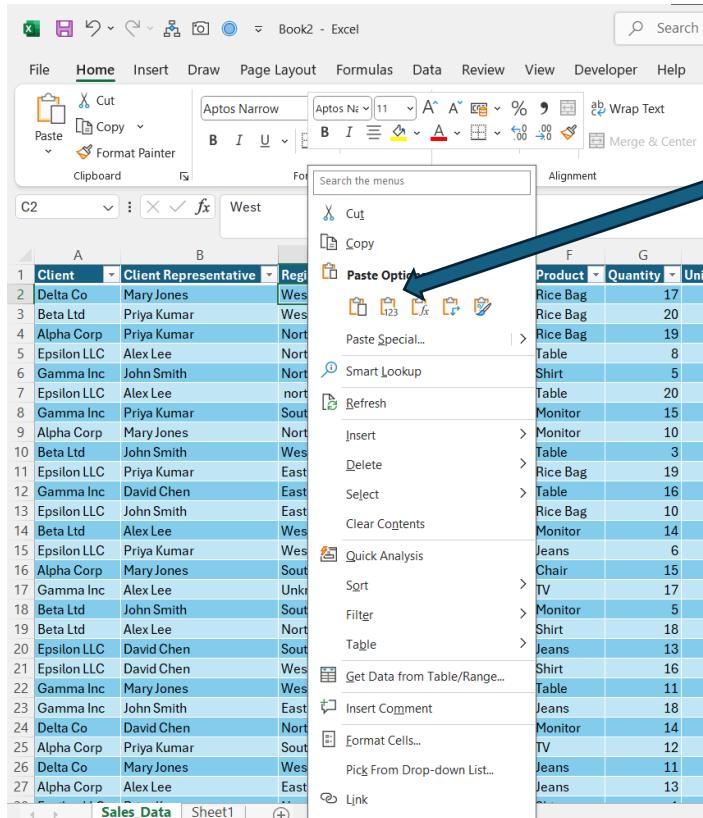
3. Copy the new column's values.



A screenshot of Microsoft Excel showing a table on Sheet1. The table has columns: Client, Client Representative, Region, Region new, Department, Product, Quantity, and Unit. The 'Region new' column contains values like West, North, South, and Unknown. The formula bar shows the formula =TRIM(PROPER([@Region])). The 'Home' tab is selected in the ribbon, and the 'Clipboard' group on the ribbon shows 'Copy' is selected. A green selection box highlights the 'Region new' column.

A	B	C	D	E	F	G		
1	Client	Client Representative	Region	Region new	Department	Product	Quantity	Unit
2	Delta Co	Mary Jones	West	West	Clothing	Rice Bag	17	
3	Beta Ltd	Priya Kumar	West	West	Electronics	Rice Bag	20	
4	Alpha Corp	Priya Kumar	North	North	Electronics	Rice Bag	19	
5	Epsilon LLC	Alex Lee	North	North	Clothing	Table	8	
6	Gamma Inc	John Smith	North	North	Electronics	Shirt	5	
7	Epsilon LLC	Alex Lee	north	North	Furniture	Table	20	
8	Gamma Inc	Priya Kumar	South	South	Clothing	Monitor	15	
9	Alpha Corp	Mary Jones	North	North	Electronics	Monitor	10	
10	Beta Ltd	John Smith	West	West	Furniture	Table	3	
11	Epsilon LLC	Priya Kumar	East	East	Groceries	Rice Bag	19	
12	Gamma Inc	David Chen	East	East	Clothing	Table	16	
13	Epsilon LLC	John Smith	East	East	Clothing	Rice Bag	10	
14	Beta Ltd	Alex Lee	West	West	Furniture	Monitor	14	
15	Epsilon LLC	Priya Kumar	West	West	Furniture	Jeans	6	
16	Alpha Corp	Mary Jones	South	South	Unknown	Chair	15	
17	Gamma Inc	Alex Lee	Unknown	Unknown	Clothing	TV	17	
18	Beta Ltd	John Smith	South	South	Groceries	Monitor	5	
19	Beta Ltd	Alex Lee	North	North	Furniture	Shirt	18	
20	Epsilon LLC	David Chen	South	South	Furniture	Jeans	13	
21	Epsilon LLC	David Chen	West	West	Furniture	Shirt	16	
22	Gamma Inc	Mary Jones	West	West	Electronics	Table	11	
23	Gamma Inc	John Smith	East	East	Clothing	Jeans	18	
24	Delta Co	David Chen	North	North	Clothing	Monitor	14	
25	Alpha Corp	Priya Kumar	South	South	Groceries	TV	12	
26	Delta Co	Mary Jones	West	West	Electronics	Jeans	11	
27	Alpha Corp	Alex Lee	East	East	Clothing	Jeans	13	

4. Right-click the original column → Paste as Values.



A screenshot of Microsoft Excel showing a table on Sheet1. The table has columns: Client, Client Representative, Region, Region new, Department, Product, Quantity, and Unit. The 'Region' column is selected, and a right-click context menu is open, showing options like Cut, Copy, Paste, Paste Special..., Smart Lookup, Refresh, Insert, Delete, Select, Clear Contents, Quick Analysis, Sort, Filter, Table, Get Data from Table/Range..., Insert Comment, Format Cells..., Pick From Drop-down List..., and Link. A blue arrow points from the 'Region' column towards the 'Paste Options' menu item.

A	B	C	D	E	F	G	
1	Client	Client Representative	Region	Region new	Product	Quantity	Unit
2	Delta Co	Mary Jones	West	West	Rice Bag	17	
3	Beta Ltd	Priya Kumar	West	West	Rice Bag	20	
4	Alpha Corp	Priya Kumar	North	North	Rice Bag	19	
5	Epsilon LLC	Alex Lee	North	North	Table	8	
6	Gamma Inc	John Smith	North	North	Shirt	5	
7	Epsilon LLC	Alex Lee	north	North	Table	20	
8	Gamma Inc	Priya Kumar	South	South	Monitor	15	
9	Alpha Corp	Mary Jones	North	North	Monitor	10	
10	Beta Ltd	John Smith	West	West	Table	3	
11	Epsilon LLC	Priya Kumar	East	East	Rice Bag	19	
12	Gamma Inc	David Chen	East	East	Table	16	
13	Epsilon LLC	John Smith	East	East	Rice Bag	10	
14	Beta Ltd	Alex Lee	West	West	Monitor	14	
15	Epsilon LLC	Priya Kumar	West	West	Jeans	6	
16	Alpha Corp	Mary Jones	South	South	Chair	15	
17	Gamma Inc	Alex Lee	Unknown	Unknown	Table	17	
18	Beta Ltd	John Smith	South	South	Monitor	5	
19	Beta Ltd	Alex Lee	North	North	Shirt	18	
20	Epsilon LLC	David Chen	South	South	Shirt	18	
21	Epsilon LLC	David Chen	West	West	Jeans	13	
22	Gamma Inc	Mary Jones	West	West	Shirt	16	
23	Gamma Inc	John Smith	East	East	Table	11	
24	Delta Co	David Chen	North	North	Jeans	18	
25	Alpha Corp	Priya Kumar	South	South	Monitor	14	
26	Delta Co	Mary Jones	West	West	TV	12	
27	Alpha Corp	Alex Lee	East	East	Jeans	11	

C	D
Region	Region new
West	West
West	West
North	North
South	South
North	North
West	West
East	East
East	East
East	East
West	West
West	West
South	South
Unknown	Unknown
South	South
North	North
South	South
West	West
West	West
East	East

5. Delete the temporary helper column.

The screenshot shows a Microsoft Excel spreadsheet with a context menu open over a temporary helper column (Column D). The menu options include Cut, Copy, Paste Options, Insert, Delete (highlighted with a blue arrow), Clear Contents, Format Cells, Column Width, Hide, and Unhide. The main table has columns for Client, Client Representative, Region, Region Name, Department, Product, Quantity, and Unit Price.

	A	B	C	D	E	F	G
1	Client	Client Representative	Region	Region Name	Department	Product	Unit Price
2	Delta Co	Mary Jones	West	West	Clothing	Rice Bag	17
3	Beta Ltd	Priya Kumar	West	West	Electronics	Rice Bag	20
4	Alpha Corp	Priya Kumar	North	North	Electronics	Rice Bag	19
5	Epsilon LLC	Alex Lee	North	North	Clothing	Table	8
6	Gamma Inc	John Smith	North	North	Electronics	Shirt	5
7	Epsilon LLC	Alex Lee	North	North	Furniture	Table	20
8	Gamma Inc	Priya Kumar	South	South	Clothing	Monitor	15
9	Alpha Corp	Mary Jones	North	North	Electronics	Monitor	10
10	Beta Ltd	John Smith	West	West	Furniture	Table	3
11	Epsilon LLC	Priya Kumar	East	East	Groceries	Rice Bag	19
12	Gamma Inc	David Chen	East	East	Clothing	Table	16
13	Epsilon LLC	John Smith	East	East	Electronics	Monitor	14
14	Beta Ltd	Alex Lee	West	West	Furniture	Monitor	6
15	Epsilon LLC	Priya Kumar	West	West	Furniture	Jeans	13
16	Alpha Corp	Mary Jones	South	South	Unknown	Chair	15
17	Gamma Inc	Alex Lee	Unknown	Unknown	Clothing	TV	17
18	Beta Ltd	John Smith	South	Groceries	Monitor	5	
19	Beta Ltd	Alex Lee	North	Furniture	Shirt	18	
20	Epsilon LLC	David Chen	South	Furniture	Jeans	13	
21	Epsilon LLC	David Chen	West	Furniture	Shirt	16	
22	Gamma Inc	Mary Jones	West	Electronics	Table	11	
23	Gamma Inc	John Smith	East	Clothing	Jeans	18	
24	Delta Co	David Chen	North	Clothing	Monitor	14	
25	Alpha Corp	Priya Kumar	South	Groceries	TV	12	
26	Delta Co	Mary Jones	West	Electronics	Jeans	11	
27	Alpha Corp	Alex Lee	East	Clothing	Jeans	13	

Department Column

- "furniture" → " Furniture "

1. Create a new column beside **Department**.

C	D	E	F
Region	Department	Department New	Product
West	Clothing		Rice Bag
West	Electronics		Rice Bag
North	Electronics		Rice Bag
North	Clothing		Table
North	Electronics		Shirt
North	Furniture		Table
South	Clothing		Monitor
North	Electronics		Monitor
West	Furniture		Table
East	Groceries		Rice Bag
East	Clothing		Table

2. Enter the formula:

=TRIM(PROPER([@Department]))

A	B	C	D	E	F	G
ntitative	Region	Department	Department	Product	Quantity	
	West	Clothing	=TRIM(PROPER([@Department]))			
	West	Electronics		Rice Bag		
	North	Electronics		Rice Bag		
	North	Clothing		Table		
	North	Electronics		Shirt		
	North	Furniture		Table		
	South	Clothing		Monitor		
	North	Electronics		Monitor		
	West	Furniture		Table		
	East	Groceries		Rice Bag		
	East	Clothing		Table		
	East	Clothing		Rice Bag		
	West	furniture		Monitor		
	West	Furniture		Icons		

D	E	F
Department	Department New	R
Clothing	Clothing	P
Electronics	Electronics	D
Electronics	Electronics	F
Clothing	Clothing	I
Electronics	Electronics	S
Furniture	Furniture	T
Clothing	Clothing	M
Electronics	Electronics	N
Furniture	Furniture	T
Groceries	Groceries	F
Clothing	Clothing	I
Clothing	Clothing	F
furniture	Furniture	M
Furniture	Furniture	J

3. Copy the new column's values.
4. Right-click the original column → Paste as Values.

The screenshot shows a Microsoft Excel spreadsheet titled "Book2 - Excel". The spreadsheet contains a table with columns: Client, Client Representative, Region, Department, and Quantity. A context menu is open over the first row of the table, specifically over the "Department" column. The menu is expanded to show various options under "Paste Options", including "Paste", "Paste Special...", "Smart Lookup", "Refresh", "Insert", "Delete", "Select", "Clear Contents", "Quick Analysis", "Sort", "Filter", "Table", "Get Data from Table/Range...", "Insert Comment", "Format Cells...", "Pick From Drop-down List...", and "Link". A large blue arrow points from the text "Right-click the original column → Paste as Values." towards the "Paste" option in the menu.

A	B	C	D	E
1	Client	Client Representative	Region	Department
2	Delta Co	Mary Jones	West	Clothing
3	Beta Ltd	Priya Kumar	West	Electronics
4	Alpha Corp	Priya Kumar	North	Electronics
5	Epsilon LLC	Alex Lee	North	Clothing
6	Gamma Inc	John Smith	North	Electronics
7	Epsilon LLC	Alex Lee	North	Furniture
8	Gamma Inc	Priya Kumar	South	Clothing
9	Alpha Corp	Mary Jones	North	Electronics
10	Beta Ltd	John Smith	West	Furniture
11	Epsilon LLC	Priya Kumar	East	Groceries
12	Gamma Inc	David Chen	East	Clothing
13	Epsilon LLC	John Smith	East	Clothing
14	Beta Ltd	Alex Lee	West	Furniture
15	Epsilon LLC	Priya Kumar	West	Furniture
16	Alpha Corp	Mary Jones	South	Unknown
17	Gamma Inc	Alex Lee	Unknown	Clothing
18	Beta Ltd	John Smith	South	Groceries
19	Beta Ltd	Alex Lee	North	Furniture
20	Epsilon LLC	David Chen	South	Furniture
21	Epsilon LLC	David Chen	West	Furniture
22	Gamma Inc	Mary Jones	West	Electronics
23	Gamma Inc	John Smith	East	Clothing
24	Delta Co	David Chen	North	Clothing
25	Alpha Corp	Priya Kumar	South	Groceries
26	Delta Co	Mary Jones	West	Electronics
27	Alpha Corp	Alex Lee	East	Clothing

Sales_Data Sheet1

D	E	P
Department	Department New	
Clothing	Clothing	R
Electronics	Electronics	R
Electronics	Electronics	R
Clothing	Clothing	T
Electronics	Electronics	S
Furniture	Furniture	T
Clothing	Clothing	M
Electronics	Electronics	M
Furniture	Furniture	T
Groceries	Groceries	R
Clothing	Clothing	T
Clothing	Clothing	R
Furniture	Furniture	M
Furniture	Furniture	J
Unknown	Unknown	C
Clothing	Clothing	T
Groceries	Groceries	M
Furniture	Furniture	S
Furniture	Furniture	J
Furniture	Furniture	S
Electronics	Electronics	T

5. Delete the temporary helper column.

The screenshot shows a Microsoft Excel spreadsheet with two columns of data. The first column is labeled 'Department' and contains values like 'Clothing', 'Electronics', 'Electronics', etc. The second column is also labeled 'Department' and contains identical values. A context menu is open over the second column, specifically over the cell at row 15 which contains 'Unknown'. The menu options include 'Cut', 'Copy', 'Paste Options...', 'Delete' (which is highlighted with a large blue arrow), 'Clear Contents', 'Format Cells...', 'Column Width...', 'Hide', and 'Unhide'. The background shows other rows of data and some formula bars at the top.

Department	Department		
Clothing	Clothing		
Electronics	Electron		
Electronics	Electron		
Clothing	Clothing		
Electronics	Electron		
Furniture	Furniture		
Clothing	Clothing		
Electronics	Electron		
Furniture	Furniture		
Groceries	Grocerie		
Clothing	Clothing		
Clothing	Clothing		
Furniture	Furniture		
Furniture	Furniture		
Unknown	Unknown		
Clothing	Clothing		
Groceries	Grocerie		
Furniture	Furniture		
Furniture	Furniture		
Furniture	Furniture	Shirt	16
Electronics	Electronics	Table	11
Clothing	Clothing	Jeans	18
Clothing	Clothing	Monitor	14

	A	B	C	D	E	F	G	H	I	J
1	Client	Client Ref	Region	Department	Product	Quantity	Unit Price	Cost Price	Date	
2	Delta Co	Mary Jones	West	Clothing	Rice Bag	17	444.00	333.47	09-11-2024	
3	Beta Ltd	Priya Kumar	West	Electronics	Rice Bag	20	959.42	714.76	06-09-2024	
4	Alpha Corp	Priya Kumar	North	Electronics	Rice Bag	19	304.09	218.42	06-12-2024	
5	Epsilon LLC	Alex Lee	North	Clothing	Table	8	811.75	592.98	16-09-2024	
6	Gamma Inc	John Smith	North	Electronics	Shirt	5	612.12	539.40	18-11-2024	
7	Epsilon LLC	Alex Lee	North	Furniture	Table	20	487.02	308.54	21-03-2024	
8	Gamma Inc	Priya Kumar	South	Clothing	Monitor	15	662.12	585.33	03-07-2024	
9	Alpha Corp	Mary Jones	North	Electronics	Monitor	10	876.45	724.51	22-11-2024	
10	Beta Ltd	John Smith	West	Furniture	Table	3	640.05	472.53	07-07-2024	
11	Epsilon LLC	Priya Kumar	East	Groceries	Rice Bag	19	626.08	473.48	29-11-2024	
12	Gamma Inc	David Chen	East	Clothing	Table	16	548.62	391.00	11-01-2024	
13	Epsilon LLC	John Smith	East	Clothing	Rice Bag	10	501.72	421.35	04-01-2024	
14	Beta Ltd	Alex Lee	West	Furniture	Monitor	14	193.17	126.61	11-09-2024	
15	Epsilon LLC	Priya Kumar	West	Furniture	Jeans	6	150.38	106.31	28-11-2024	
16	Alpha Corp	Mary Jones	South	Unknown	Chair	15	632.45	468.12	23-04-2024	
17	Gamma Inc	Alex Lee	Unknown	Clothing	TV	17	697.88	460.35	27-03-2024	
18	Beta Ltd	John Smith	South	Groceries	Monitor	5	525.79	431.94	22-07-2024	
19	Beta Ltd	Alex Lee	North	Furniture	Shirt	18	292.53	256.11	25-08-2024	
20	Epsilon LLC	David Chen	South	Furniture	Jeans	13	240.90	199.91	01-03-2024	
21	Epsilon LLC	David Chen	West	Furniture	Shirt	16	988.71	683.75	24-05-2024	
22	Gamma Inc	Mary Jones	West	Electronics	Table	11	861.09	529.08	29-04-2024	
23	Gamma Inc	John Smith	East	Clothing	Jeans	18	962.59	722.69	16-07-2024	
24	Delta Co	David Chen	North	Clothing	Monitor	14	810.27	602.29	01-11-2024	
25	Alpha Corp	Priya Kumar	South	Groceries	TV	12	253.28	166.30	10-08-2024	
26	Delta Co	Mary Jones	West	Electronics	Jeans	11	713.78	439.58	18-08-2024	
27	Alpha Corp	Alex Lee	East	Clothing	Jeans	13	726.72	545.23	18-02-2024	
28	Epsilon LLC	Priya Kumar	North	Electronics	Shirt	1	466.34	384.36	16-04-2024	

Step 6. Create New Calculated Columns

a) Revenue

- Revenue = [Quantity] * [Unit Price]

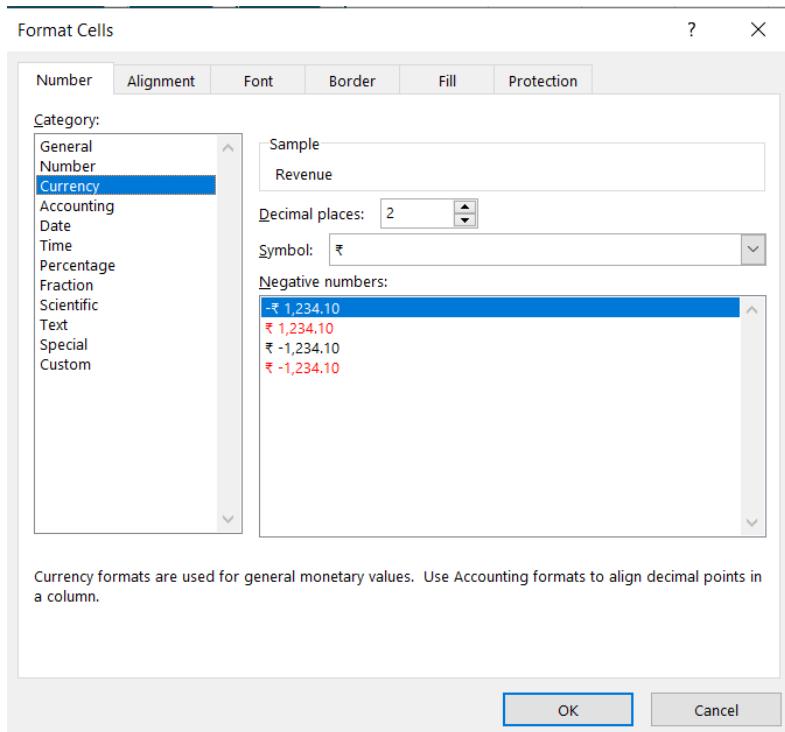
I	J	K	L	M	N
Date	Revenue				
09-11-2024	=[@Quantity]*[@[Unit Price]]				
06-09-2024					
06-12-2024					
16-09-2024					
18-11-2024					
21-03-2024					

	H	I	J
	Cost Price	Date	Revenue
0	333.47	09-11-2024	7548
2	714.76	06-09-2024	19188.4
9	218.42	06-12-2024	5777.71
5	592.98	16-09-2024	6494
2	539.40	18-11-2024	3060.6
2	308.54	21-03-2024	9740.4
2	585.33	03-07-2024	9931.8
5	724.51	22-11-2024	8764.5
5	472.53	07-07-2024	1920.15

- Change the format to **Currency**.
- Set decimal places as needed.

The screenshot shows a Microsoft Excel spreadsheet titled "Cleaned_Sales_Data - Excel". The spreadsheet contains a table of sales data with columns: Client, Client Ref, Region, Department, Product, Quantity, Unit Price, Cost Price, Date, and Revenue. A context menu is open over the cell containing the value "15819.36" in row 21, column J. The menu includes options like Cut, Copy, Paste Options, Insert, Delete, Clear Contents, Format Cells, Column Width..., Hide, and Unhide.

Client	Client Ref	Region	Department	Product	Quantity	Unit Price	Cost Price	Date	Revenue
Delta Co	Mary Jones	West	Clothing	Rice Bag	17	444.00	333.47	09-11-2024	7548
Beta Ltd	Priya Kumar	West	Electronics	Rice Bag	20	959.42	714.76	06-09-2024	19188.4
Alpha Corp	Priya Kumar	North	Electronics	Rice Bag	19	304.09	218.42	06-12-2024	5777.71
Epsilon LLC	Alex Lee	North	Clothing	Table	8	811.75	592.98	16-09-2024	6494
Gamma Inc	John Smith	North	Electronics	Shirt	5	612.12	539.40	18-11-2024	8764.5
Epsilon LLC	Alex Lee	North	Furniture	Table	20	487.02	308.54	21-03-2024	3060.6
Gamma Inc	Priya Kumar	South	Clothing	Monitor	15	662.12	585.33	03-07-2024	9931.8
Alpha Corp	Mary Jones	North	Electronics	Monitor	10	876.45	724.51	22-11-2024	9740.4
Beta Ltd	John Smith	West	Furniture	Table	3	640.05	472.53	07-07-2024	1920.15
Epsilon LLC	Priya Kumar	East	Groceries	Rice Bag	19	626.08	473.48	29-11-2024	11343.78
Gamma Inc	David Chen	East	Clothing	Table	16	548.62	391.00	11-01-2024	3039.36
Epsilon LLC	John Smith	East	Clothing	Rice Bag	10	501.72	421.35	04-01-2024	17326.62
Beta Ltd	Alex Lee	West	Furniture	Monitor	14	193.17	126.61	11-09-2024	20
Epsilon LLC	Priya Kumar	West	Furniture	Jeans	6	150.38	106.31	28-11-2024	11343.78
Alpha Corp	Mary Jones	South	Unknown	Chair	15	632.45	468.12	23-04-2024	3039.36
Gamma Inc	Alex Lee	Unknown	Clothing	TV	17	697.88	460.35	27-03-2024	11343.78
Beta Ltd	John Smith	South	Groceries	Monitor	5	525.79	431.94	22-07-2024	20
Beta Ltd	Alex Lee	North	Furniture	Shirt	18	292.53	256.11	25-08-2024	5
Epsilon LLC	David Chen	South	Furniture	Jeans	13	240.90	199.91	01-03-2024	15819.36
Epsilon LLC	David Chen	West	Furniture	Shirt	16	988.71	683.75	24-05-2024	15819.36
Gamma Inc	Mary Jones	West	Electronics	Table	11	861.09	529.08	29-04-2024	9447.36
Gamma Inc	John Smith	East	Clothing	Jeans	18	962.59	722.69	16-07-2024	11343.78
Delta Co	David Chen	North	Clothing	Monitor	14	810.27	602.29	01-11-2024	7851.58
Alpha Corp	Priya Kumar	South	Groceries	TV	12	253.28	166.30	10-08-2024	3039.36
Delta Co	Mary Jones	West	Electronics	Jeans	11	713.78	439.58	18-08-2024	9447.36
Alpha Corp	Alex Lee	East	Clothing	Jeans	13	726.72	545.23	18-02-2024	15819.36
Epsilon LLC	Priya Kumar	North	Electronics	Shirt	1	466.34	384.36	16-04-2024	466.34



Revenue
₹ 7,548.00
₹ 19,188.40
₹ 5,777.71
₹ 6,494.00
₹ 3,060.60
₹ 9,740.40
₹ 9,931.80
₹ 8,764.50
₹ 1,920.15
₹ 11,895.52
₹ 8,777.92
₹ 5,017.20

b) Profit

Profit = → [Revenue] - ([Quantity] * [Cost Price])

=[@Revenue]-[@Quantity]*[@[Cost Price]]													
State	Region	Department	Product	Quantity	Unit Price	Cost Price	Date	Revenue	Profit	L	M	N	O
West	Clothing	Rice Bag	17	444.00	333.47	09-11-2024	₹ 7,548.00	=[@Revenue]-[@Quantity]*[@[Cost Price]]					
West	Electronics	Rice Bag	20	959.42	714.76	06-09-2024	₹ 19,188.40						
North	Electronics	Rice Bag	19	304.09	218.42	06-12-2024	₹ 5,777.71						
North	Clothing	Table	8	811.75	592.98	16-09-2024	₹ 6,494.00						
North	Electronics	Shirt	5	612.12	539.40	18-11-2024	₹ 3,060.60						
North	Furniture	Table	20	487.02	308.54	21-03-2024	₹ 9,740.40						
South	Clothing	Monitor	15	662.12	585.33	03-07-2024	₹ 9,931.80						
North	Electronics	Monitor	10	876.45	724.51	22-11-2024	₹ 8,764.50						
West	Furniture	Table	3	640.05	472.53	07-07-2024	₹ 1,920.15						
East	Groceries	Rice Bag	19	626.08	473.48	29-11-2024	₹ 11,895.52						

Date	Revenue	Profit
09-11-2024	₹ 7,548.00	₹ 1,879.01
06-09-2024	₹ 19,188.40	₹ 4,893.20
06-12-2024	₹ 5,777.71	₹ 1,627.73
16-09-2024	₹ 6,494.00	₹ 1,750.16
18-11-2024	₹ 3,060.60	₹ 363.60
21-03-2024	₹ 9,740.40	₹ 3,569.60
03-07-2024	₹ 9,931.80	₹ 1,151.85
22-11-2024	₹ 8,764.50	₹ 1,519.40
07-07-2024	₹ 1,920.15	₹ 502.56
29-11-2024	₹ 11,895.52	₹ 2,899.40
11-01-2024	₹ 8,777.92	₹ 2,521.92
04-01-2024	₹ 5,017.20	₹ 803.70

c) Profit Margin

Profit _Margin = → =[Profit] / [Revenue]

=[@Profit]/[@Revenue]														
A	C	D	E	F	G	H	I	J	K	L	M	N	O	P
State	Region	Department	Product	Quantity	Unit Price	Cost Price	Date	Revenue	Profit	Profit M				
	West	Clothing	Rice Bag	17	444.00	333.47	09-11-2024	₹ 7,548.00	₹ 1,879.01	=[@Profit]/[@Revenue]				
	West	Electronics	Rice Bag	20	959.42	714.76	06-09-2024	₹ 19,188.40	₹ 4,893.20					
	North	Electronics	Rice Bag	19	304.09	218.42	06-12-2024	₹ 5,777.71	₹ 1,627.73					
	North	Clothing	Table	8	811.75	592.98	16-09-2024	₹ 6,494.00	₹ 1,750.16					
	North	Electronics	Shirt	5	612.12	539.40	18-11-2024	₹ 3,060.60	₹ 363.60					
	north	Furniture	Table	20	487.02	308.54	21-03-2024	₹ 9,740.40	₹ 3,569.60					
	South	Clothing	Monitor	15	662.12	585.33	03-07-2024	₹ 9,931.80	₹ 1,151.85					
	North	Electronics	Monitor	10	876.45	724.51	22-11-2024	₹ 8,764.50	₹ 1,519.40					
	W	T	T	0	0.00	0.00	07-07-2024	₹ 0.00	₹ 0.00					

Revenue	Profit	Profit M
₹ 7,548.00	₹ 1,879.01	0.248941
₹ 19,188.40	₹ 4,893.20	0.255008
₹ 5,777.71	₹ 1,627.73	0.281726
₹ 6,494.00	₹ 1,750.16	0.269504
₹ 3,060.60	₹ 363.60	0.1188
₹ 9,740.40	₹ 3,569.60	0.366474
₹ 9,931.80	₹ 1,151.85	0.115976
₹ 8,764.50	₹ 1,519.40	0.173358

- Change the format to **Percentage**.
- Set decimal places as needed.

Search

File Open Help Table Design

Wrap Text General Conditional Formatting as Table Styles

Merge & Center Number Styles

Cut Copy Paste Options: Paste Special... Insert Delete Clear Contents Format Cells... Column Width... Hide Unhide

AutoSum

Format Cells...

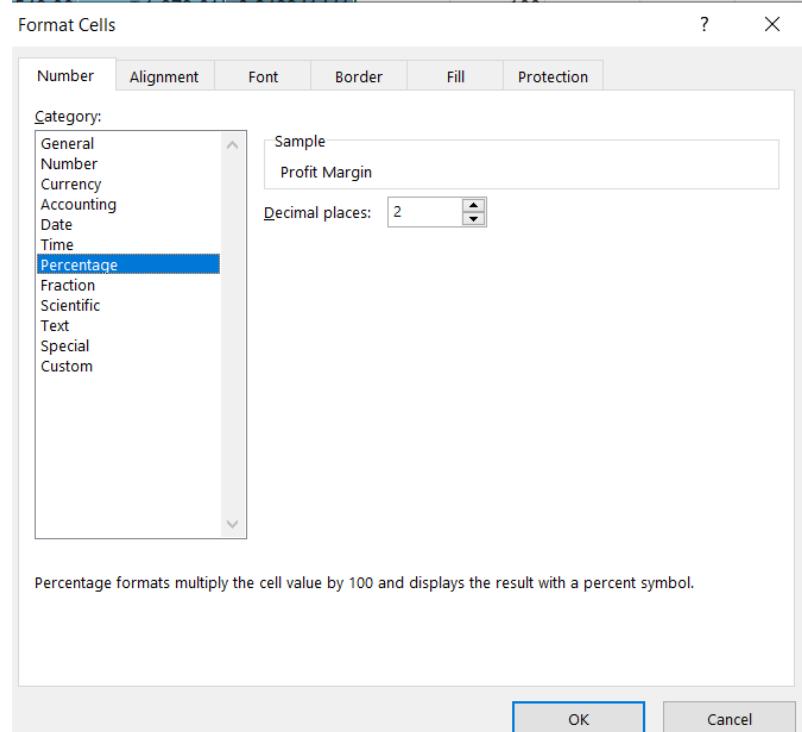
Number Alignment Font Border Fill Protection

Category: Percentage

Sample Profit Margin

Decimal places: 2

G	H	I	J	K	
Net Price	Cost Price	Date	Revenue	Profit	Profit Margin
444.00	333.47	09-11-2024	₹ 7,548.00	₹ 1,879.01	0.246
959.42	714.76	06-09-2024	₹ 19,188.40	₹ 4,893.20	0.255
304.09	218.42	06-12-2024	₹ 5,777.71	₹ 1,627.73	0.281
811.75	592.98	16-09-2024	₹ 6,494.00	₹ 1,750.16	0.269
612.12	539.40	18-11-2024	₹ 3,060.60	₹ 363.60	0.118
487.02	308.54	21-03-2024	₹ 9,740.40	₹ 3,569.60	0.366
662.12	585.33	03-07-2024	₹ 9,931.80	₹ 1,151.85	0.115
876.45	724.51	22-11-2024	₹ 8,764.50	₹ 1,519.40	0.173
640.05	472.53	07-07-2024	₹ 1,920.15	₹ 502.56	0.261
626.08	473.48	29-11-2024	₹ 11,895.52	₹ 2,899.40	0.243
548.62	391.00	11-01-2024	₹ 8,777.92	₹ 2,521.92	0.287
501.72	421.35	04-01-2024	₹ 5,017.20	₹ 803.70	0.160
193.17	126.61	11-09-2024	₹ 2,704.38	₹ 931.84	0.344566962
150.38	106.31	28-11-2024	₹ 902.28	₹ 264.42	0.293
632.45	468.12	23-04-2024	₹ 9,486.75	₹ 2,464.95	0.255
697.88	460.35	27-03-2024	₹ 11,863.96	₹ 4,038.01	0.340
525.79	431.94	22-07-2024	₹ 2,628.95	₹ 469.25	0.178493315
292.53	256.11	25-08-2024	₹ 5,265.54	₹ 655.56	0.124500051



Profit Margin
24.89%
25.50%
28.17%
26.95%
11.88%
36.65%
11.60%

	A	B	C	D	E	F	G	H	I	J	K	L
1	Client	Client Representative	Region	Department	Product	Quantity	Unit Price	Cost Price	Date	Revenue	Profit	Profit M%
2	Delta Co	Mary Jones	West	Clothing	Rice Bag	17	444.00	333.47	09-11-2024	₹ 7,548.00	₹ 1,879.01	24.89%
3	Beta Ltd	Priya Kumar	West	Electronics	Rice Bag	20	959.42	714.76	06-09-2024	₹ 19,188.40	₹ 4,893.20	25.50%
4	Alpha Corp	Priya Kumar	North	Electronics	Rice Bag	19	304.09	218.42	06-12-2024	₹ 5,777.71	₹ 1,627.73	28.17%
5	Epsilon LLC	Alex Lee	North	Clothing	Table	8	811.75	592.98	16-09-2024	₹ 6,494.00	₹ 1,750.16	26.95%
6	Gamma Inc	John Smith	North	Electronics	Shirt	5	612.12	539.40	18-11-2024	₹ 3,060.60	₹ 363.60	11.88%
7	Epsilon LLC	Alex Lee	north	Furniture	Table	20	487.02	308.54	21-03-2024	₹ 9,740.40	₹ 3,569.60	36.65%
8	Gamma Inc	Priya Kumar	South	Clothing	Monitor	15	662.12	585.33	03-07-2024	₹ 9,931.80	₹ 1,151.85	11.60%
9	Alpha Corp	Mary Jones	North	Electronics	Monitor	10	876.45	724.51	22-11-2024	₹ 8,764.50	₹ 1,519.40	17.34%
10	Beta Ltd	John Smith	West	Furniture	Table	3	640.05	472.53	07-07-2024	₹ 1,920.15	₹ 502.56	26.17%
11	Epsilon LLC	Priya Kumar	East	Groceries	Rice Bag	19	626.08	473.48	29-11-2024	₹ 11,895.52	₹ 2,899.40	24.37%
12	Gamma Inc	David Chen	East	Clothing	Table	16	548.62	391.00	11-01-2024	₹ 8,777.92	₹ 2,521.92	28.73%
13	Epsilon LLC	John Smith	East	Clothing	Rice Bag	10	501.72	421.35	04-01-2024	₹ 5,017.20	₹ 803.70	16.02%
14	Beta Ltd	Alex Lee	West	furniture	Monitor	14	193.17	126.61	11-09-2024	₹ 2,704.38	₹ 931.84	34.46%
15	Epsilon LLC	Priya Kumar	West	Furniture	Jeans	6	150.38	106.31	28-11-2024	₹ 902.28	₹ 264.42	29.31%
16	Alpha Corp	Mary Jones	South	Unknown	Chair	15	632.45	468.12	23-04-2024	₹ 9,486.75	₹ 2,464.95	25.98%
17	Gamma Inc	Alex Lee	Unknown	Clothing	TV	17	697.88	460.35	27-03-2024	₹ 11,863.96	₹ 4,038.01	34.04%
18	Beta Ltd	John Smith	South	Groceries	Monitor	5	525.79	431.94	22-07-2024	₹ 2,628.95	₹ 469.25	17.85%
19	Beta Ltd	Alex Lee	North	Furniture	Shirt	18	292.53	256.11	25-08-2024	₹ 5,265.54	₹ 655.56	12.45%
20	Epsilon LLC	David Chen	South	Furniture	Jeans	13	240.90	199.91	01-03-2024	₹ 3,131.70	₹ 532.87	17.02%
21	Epsilon LLC	David Chen	West	Furniture	Shirt	16	988.71	683.75	24-05-2024	₹ 15,819.36	₹ 4,879.36	30.84%
22	Gamma Inc	mary jones	West	Electronics	Table	11	861.09	529.08	29-04-2024	₹ 9,471.99	₹ 3,652.11	38.56%
23	Gamma Inc	John Smith	East	Clothing	Jeans	18	962.59	722.69	16-07-2024	₹ 17,326.62	₹ 4,318.20	24.92%
24	Delta Co	David Chen	North	Clothing	Monitor	14	810.27	602.29	01-11-2024	₹ 11,343.78	₹ 2,911.72	25.67%
25	Alpha Corp	Priya Kumar	South	Groceries	TV	12	253.28	166.30	10-08-2024	₹ 3,039.36	₹ 1,043.76	34.34%
26	Delta Co	Mary Jones	West	Electronics	Jeans	11	713.78	439.58	18-08-2024	₹ 7,851.58	₹ 3,016.20	38.42%
27	ALPHA CORP	Alex Lee	East	Clothing	Jeans	13	726.72	545.23	18-02-2024	₹ 9,447.36	₹ 2,359.37	24.97%
28	Epsilon LLC	Priya Kumar	North	Electronics	Shirt	1	466.34	384.36	16-04-2024	₹ 466.34	₹ 81.98	17.58%

Step 7: Create Pivot Tables

- Click anywhere inside your cleaned dataset.
- Go to **Insert → PivotTable**.
- Select **New Worksheet**

Build Pivot Table

1. Revenue by Department

Rows: Department

Values: Sum of Revenue

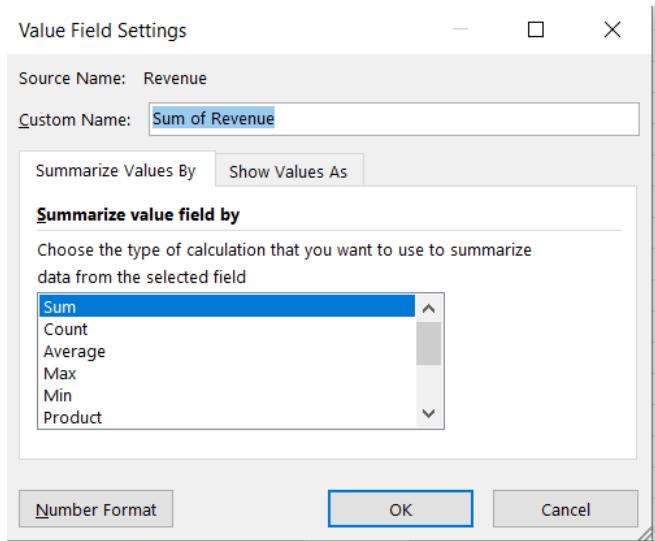
The screenshot shows a PivotTable Fields dialog box on the right and a PivotTable grid on the left. The grid displays a table with 'Row Labels' (Department) and 'Sum of Revenue' (Value). The dialog box lists fields: Revenue (checked), profit, Profit Margin, and More Tables... Under Rows, 'Department' is selected. Under Values, 'Sum of Revenue' is selected. Buttons for 'Defer Layout Update' and 'Update' are at the bottom.

Row Labels	Sum of Revenue
Clothing	152265.29
Electronics	166482.57
Furniture	110915.63
Groceries	159471.26
Unknown	35098.65
Grand Total	624233.4

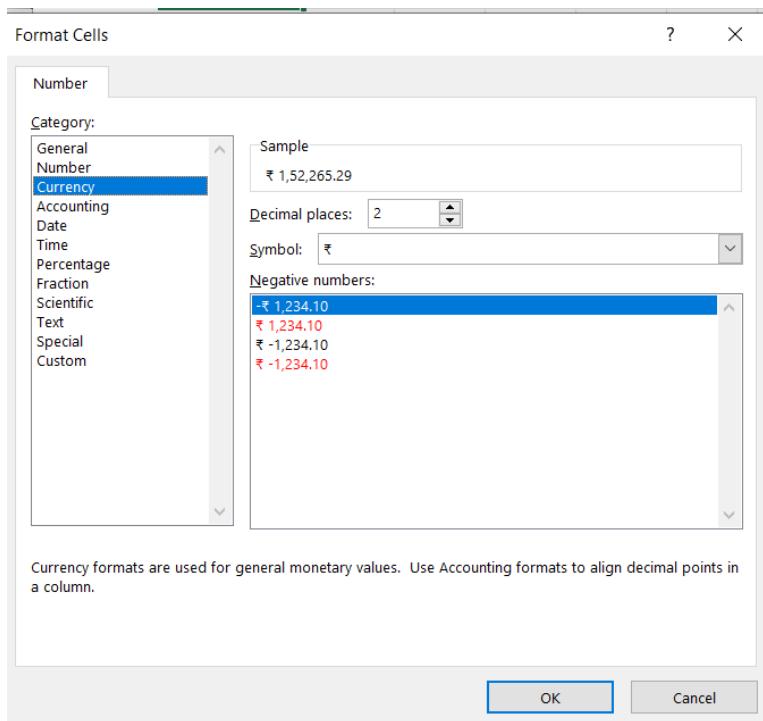
- Right-Click on any number in the PivotTable's Revenue column
- Select Value Field Settings.

The screenshot shows a context menu open over the cell containing '166482.57' in the Electronics row of the PivotTable. The menu includes options like Calibri, 11pt, Copy, Format Cells..., Refresh, Sort, Remove "Sum of Revenue", Summarize Values By, Show Values As, Show Details, Value Field Settings..., PivotTable Options..., and Hide Field List. A 'Defer Layout Update' checkbox is at the bottom.

- In the dialog box, click the **Number Format** button



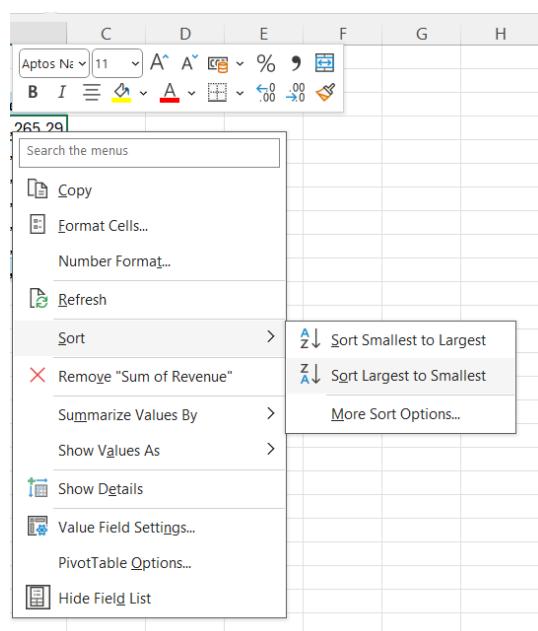
- In the Format Cells box, select the **Currency**



- Click **OK** on both dialog boxes.

	Row Labels	Sum of Revenue
3	Clothing	₹ 1,52,265.29
4	Electronics	₹ 1,66,482.57
5	Furniture	₹ 1,10,915.63
6	Groceries	₹ 1,59,471.26
7	Unknown	₹ 35,098.65
9	Grand Total	₹ 6,24,233.40
10		

- Sort largest to smallest to see top departments



	Row Labels	Sum of Revenue
	Electronics	₹ 1,66,482.57
	Groceries	₹ 1,59,471.26
	Clothing	₹ 1,52,265.29
	Furniture	₹ 1,10,915.63
	Unknown	₹ 35,098.65
	Grand Total	₹ 6,24,233.40

2. Profit by Department Analysis

Rows: Department

Values: Sum of Profit

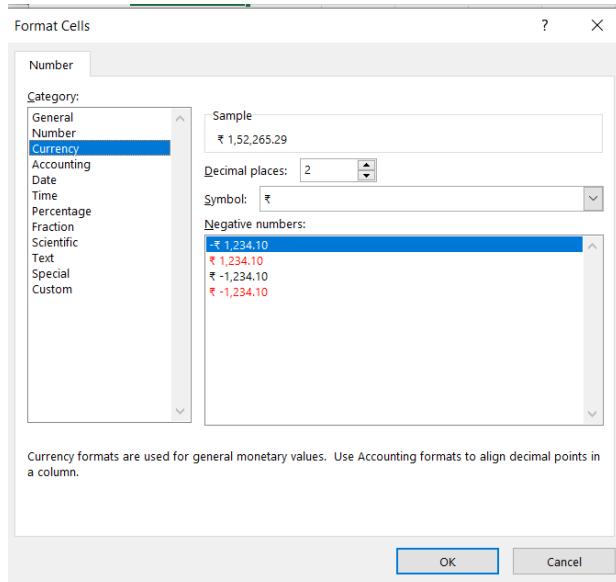
Row Labels	Sum of Profit
Clothing	37224.79
Electronics	45714.19
Furniture	25824.76
Groceries	33569.01
Unknown	10495.3
Grand Total	152828.05

- Right-Click on any number in the PivotTable's Profit column
- Select Value Field Settings.

- In the dialog box, click the Number Format button

Source Name:	Revenue
Custom Name:	Sum of Revenue
Summarize Values By	Show Values As
Summarize value field by	
Choose the type of calculation that you want to use to summarize data from the selected field	
<input checked="" type="radio"/> Sum <input type="radio"/> Count <input type="radio"/> Average <input type="radio"/> Max <input type="radio"/> Min <input type="radio"/> Product	

- In the Format Cells box, select the **Currency**



- Click **OK** on both dialog boxes.

Row Labels	Sum of Profit
Clothing	₹ 37,224.79
Electronics	₹ 45,714.19
Furniture	₹ 25,824.76
Groceries	₹ 33,569.01
Unknown	₹ 10,495.30
Grand Total	₹ 1,52,828.05

- Sort largest to smallest to see top departments

Row Labels	Sum of Profit
Electronics	₹ 45,714.19
Clothing	₹ 37,224.79
Groceries	₹ 33,569.01
Furniture	₹ 25,824.76
Unknown	₹ 10,495.30
Grand Total	₹ 1,52,828.05

3. Average Profit Margin by Department

PivotTable Fields

Choose fields to add to report:

Row Labels Sum of Profit Margin

Category	Value
Clothing	6.524536788
Electronics	6.839458927
Furniture	4.781201124
Groceries	5.046547759
Unknown	1.377373949
Grand Total	24.56911855

Drag fields between areas below:

Filters Columns

Rows Values

Department Sum of Profit Margin

- Right click on any number in the Profit Margin field. In Summarize value select Average

Sum of Profit Margin

Search the menus

- Copy
- Format Cells...
- Number Format...
- Refresh
- Sort >
- Remove "Sum of Profit Margin"
- Summarize Values By > **Average**
- Show Values As >
- Show Details
- Value Field Settings...
- PivotTable Options...
- Hide Field List

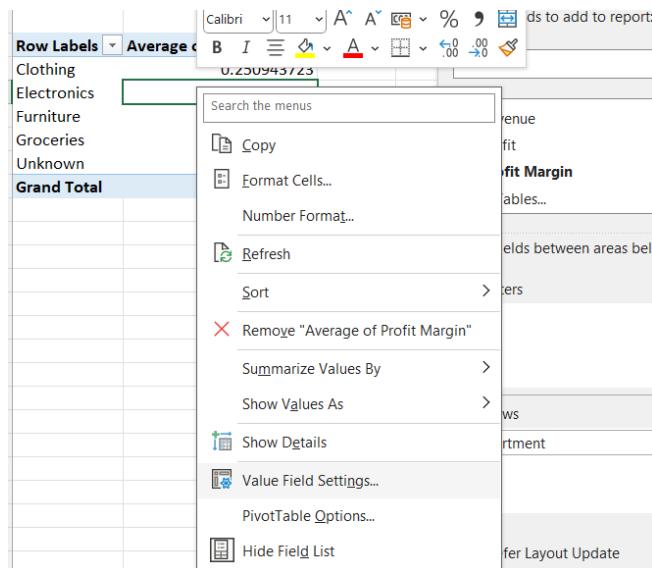
ag fields between areas below:

Filters Columns

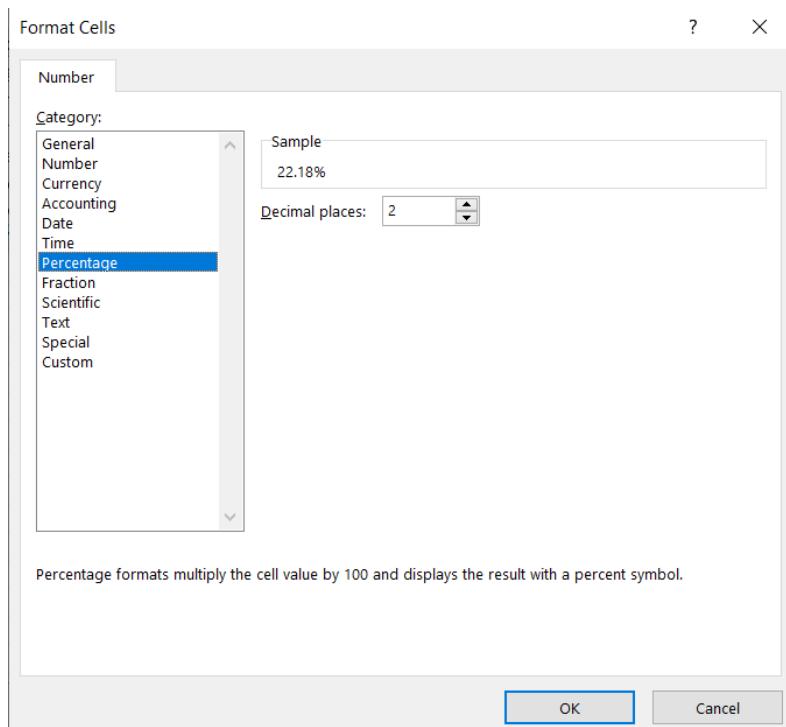
Sum Count Average Max Min Product Distinct Count More Options...

Row Labels	Average of Profit Margin
Clothing	0.250943723
Electronics	0.273578357
Furniture	0.227676244
Groceries	0.21941512
Unknown	0.27547479
Grand Total	0.245691185

- Right-Click on any number in the PivotTable's Profit Margin column
- Select Value Field Settings.



- In the dialog box, click the **Number Format** button
- In the Format Cells box, select the **Percentage**



- Click **OK** on both dialog boxes.

Row Labels	Average of Profit Margin
Clothing	25.09%
Electronics	27.36%
Furniture	22.18%
furniture	34.46%
Groceries	21.94%
Unknown	27.55%
Grand Total	24.57%

- Sort largest to smallest to see top departments

The screenshot shows a Microsoft Excel PivotTable with the following data:

Row Labels	Average of Profit Margin
Clothing	25.09%
Electronics	27.36%
Furniture	22.18%
Groceries	21.94%
Unknown	27.55%
Grand Total	24.57%

A context menu is open over the cell containing "22.18%". The "Sort" option is expanded, showing "Sort Smallest to Largest" and "Sort Largest to Smallest" as choices.

Row Labels	Average of Profit Margin
Unknown	27.55%
Electronics	27.36%
Clothing	25.09%
Furniture	22.77%
Groceries	21.94%
Grand Total	24.57%

4. Revenue trend over Date

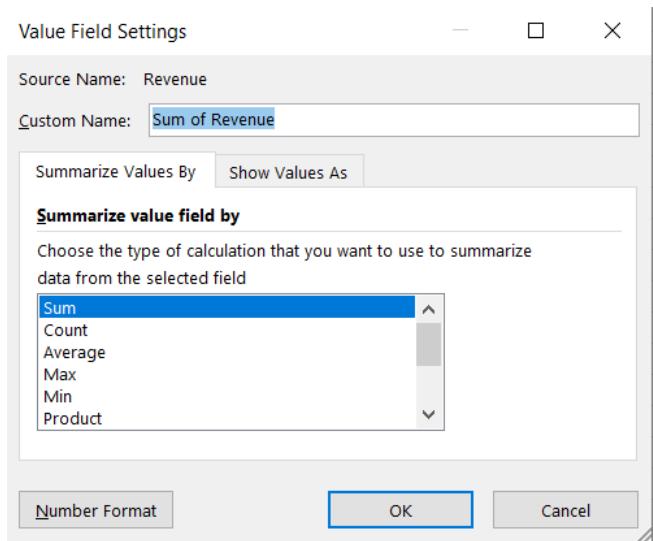
PivotTable Fields dialog box showing the configuration for the PivotTable.

Row Labels	Sum of Revenue
Jan	41800.2
Feb	26516.93
Mar	47469.77
Apr	70190.63
May	52735.26
Jun	17469.46
Jul	64423.76
Aug	47972.92
Sep	73249.85
Oct	57571.8
Nov	76285.09
Dec	48547.73
Grand Total	624233.4

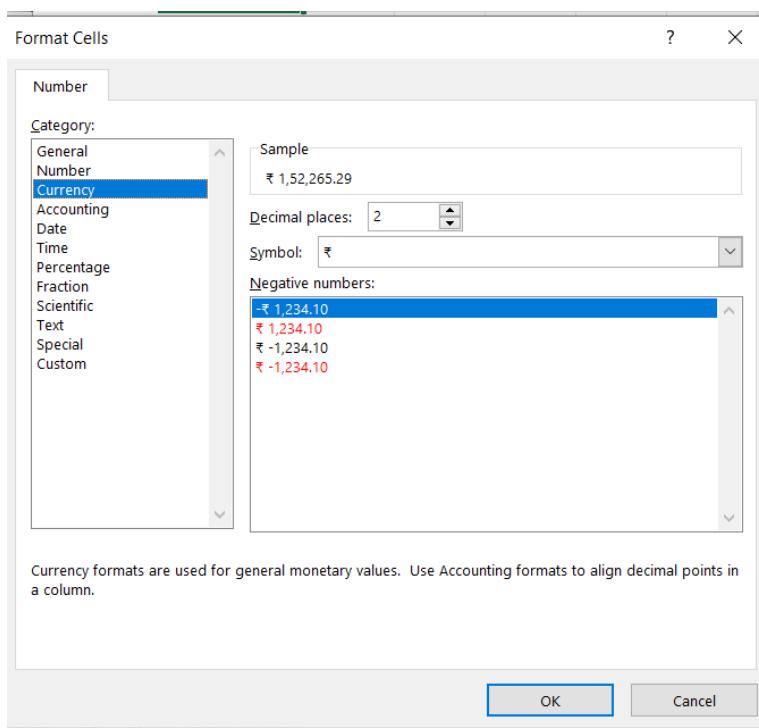
- Right-Click on any number in the PivotTable's Revenue column
- Select Value Field Settings.

Excel ribbon showing the Home tab selected. A context menu is open over a cell in the PivotTable, with 'Value Field Settings...' highlighted. The PivotTable Fields dialog box is visible on the right.

- In the dialog box, click the **Number Format** button



- In the Format Cells box, select the **Currency**



- Click **OK** on both dialog boxes.

48		
49	Row Labels	Sum of Revenue
50	Jan	₹ 41,800.20
51	Feb	₹ 26,516.93
52	Mar	₹ 47,469.77
53	Apr	₹ 70,190.63
54	May	₹ 52,735.26
55	Jun	₹ 17,469.46
56	Jul	₹ 64,423.76
57	Aug	₹ 47,972.92
58	Sep	₹ 73,249.85
59	Oct	₹ 57,571.80
60	Nov	₹ 76,285.09
61	Dec	₹ 48,547.73
62	Grand Total	₹ 6,24,233.40
63		

5. Average Profit Margin by Region, according to the Product

PivotTable Fields

Choose fields to add to report:

Sum of Profit Margin Column Labels

Region	Chair	Jeans	Laptop	Monitor	Rice Bag	Shirt	Table	TV	Grand Total
East	0.748090117	1.841579964	0.558942801	0.400347565	0.827284225	0.823852425	0.677641908	5.877739005	
North	0.57321779		0.858002808	0.993985798	0.57086919	1.190153572	0.661429946	4.847659104	
South	1.129358626	0.548995638		0.294469271	0.205281005	0.301074504	0.225445261	1.756445489	4.461069795
Unknown	0.276141291	0.206009962		0.157023452	0.147586625		0.340359374	1.127210704	
West	1.606662652	0.866061078	0.854733786	1.494221406	0.788341254	1.860604582	0.78485131	8.255439938	
Grand Total	2.153590034	4.776519877	1.425003879	2.40755343	3.677795886	2.631723998	3.9538459323	3.543086119	24.56911855

Drag fields between areas below:

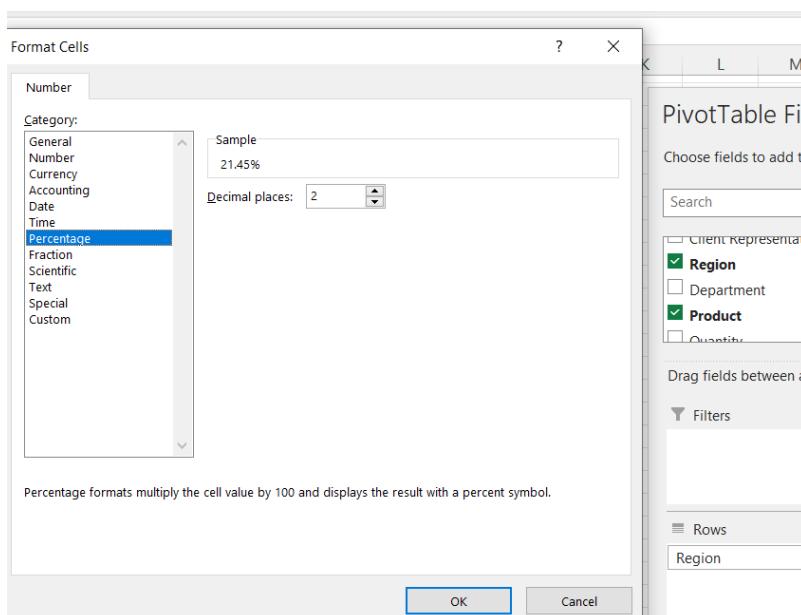
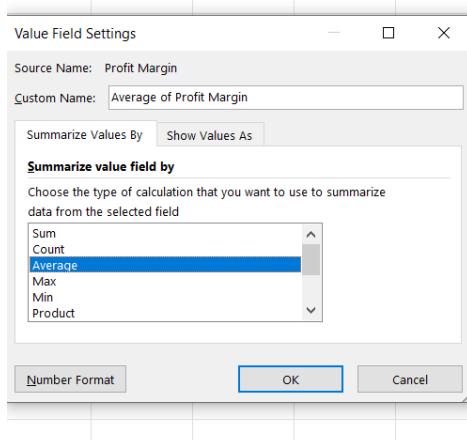
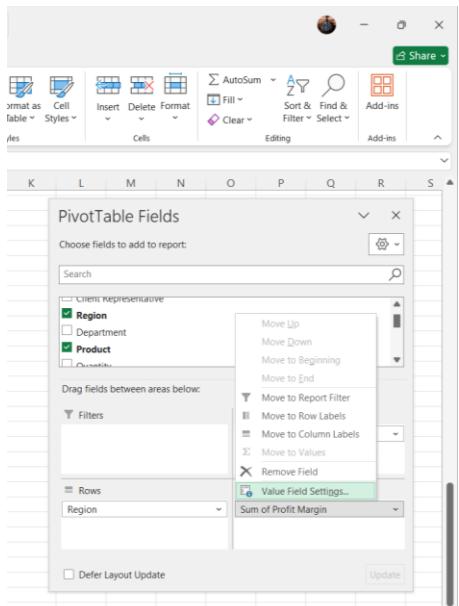
Filters Columns

Product

Rows Values

Region Sum of Profit Margin

Defer Layout Update Update



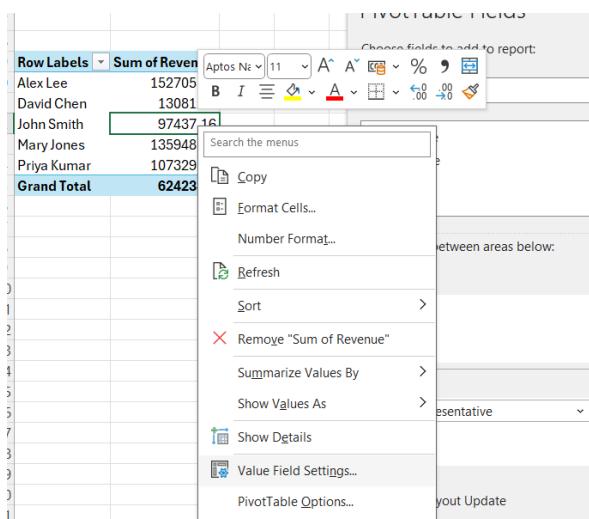
Average of Profit Margin		Column Labels								
Row Labels		Chair	Jeans	Laptop	Monitor	Rice Bag	Shirt	Table	TV	Grand Total
East		37.40%	26.31%	27.95%	20.02%	20.68%	20.60%	33.88%		25.56%
North			28.66%		21.45%	24.85%	14.27%	29.75%	22.05%	23.08%
South		22.59%	27.45%		14.72%	20.53%	30.11%	22.54%	29.27%	24.78%
Unknown		27.61%	20.61%			15.70%	14.76%		34.04%	22.54%
West		26.78%	21.65%	28.49%	24.90%	26.28%	26.58%	19.62%		25.02%
Grand Total		26.92%	26.54%	23.75%	21.89%	22.99%	20.24%	28.24%	25.31%	24.57%

6. Revenue by Sales Person

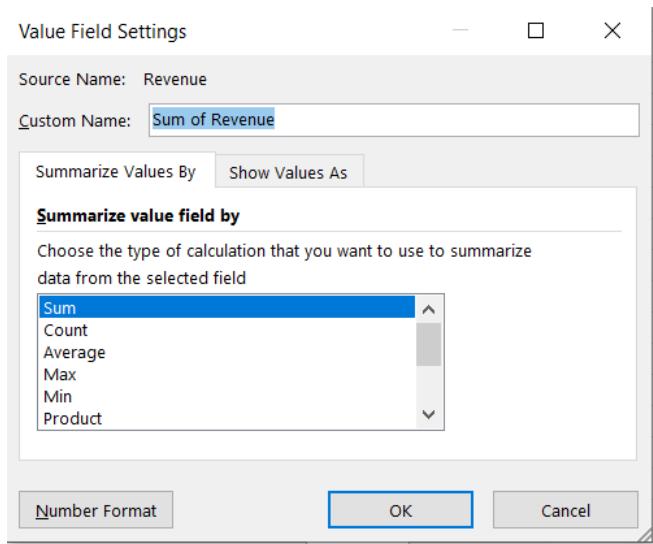
The screenshot shows a PivotTable Fields dialog box and its corresponding PivotTable view. The PivotTable Fields dialog box is titled "PivotTable Fields" and contains a search bar and a list of fields: Client, Client Representative, Region, and Department. The "Client Representative" field is selected. Below the dialog, the PivotTable view displays "Sum of Revenue" for various sales people:

Row Labels	Sum of Revenue
Alex Lee	₹ 1,52,705.94
David Chen	₹ 1,30,812.60
John Smith	₹ 97,437.16
Mary Jones	₹ 1,35,948.11
Priya Kumar	₹ 1,07,329.59
Grand Total	₹ 6,24,233.40

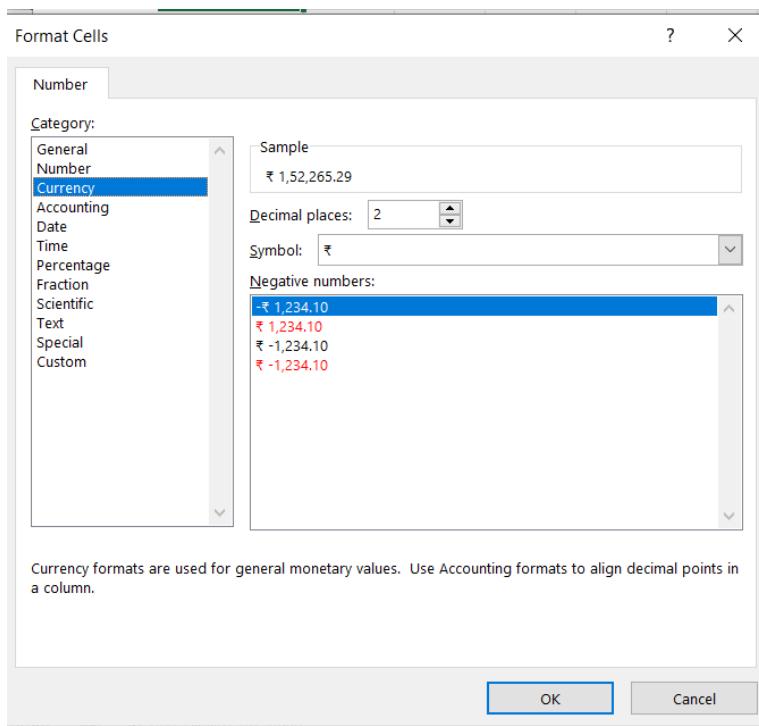
- Right-Click on any number in the PivotTable's Revenue column
- Select Value Field Settings.



- In the dialog box, click the **Number Format** button



- In the Format Cells box, select the **Currency**



- Click **OK** on both dialog boxes.

Row Labels	Sum of Revenue
Alex Lee	₹ 1,52,705.94
David Chen	₹ 1,30,812.60
John Smith	₹ 97,437.16
Mary Jones	₹ 1,35,948.11
Priya Kumar	₹ 1,07,329.59
Grand Total	₹ 6,24,233.40

- Sort largest to smallest to see top departments

The screenshot shows a context menu open over the 'Sum of Revenue' cell for David Chen. The menu includes options like Copy, Format Cells..., Number Format..., Refresh, Sort (with 'Sort Largest to Smallest' selected), Remove "Sum of Revenue", Summarize Values By, Show Values As, Show Details, and Value Field Settings.

Row Labels	Sum of Revenue
Alex Lee	₹ 1,52,705.94
David Chen	₹ 1,30,812.60
John Smith	₹ 97,437.16
Mary Jones	₹ 1,35,948.11
Priya Kumar	₹ 1,07,329.59
Grand Total	₹ 6,24,233.40

Row Labels	Sum of Revenue
Alex Lee	₹ 1,52,705.94
Mary Jones	₹ 1,35,948.11
David Chen	₹ 1,30,812.60
Priya Kumar	₹ 1,07,329.59
John Smith	₹ 97,437.16
Grand Total	₹ 6,24,233.40

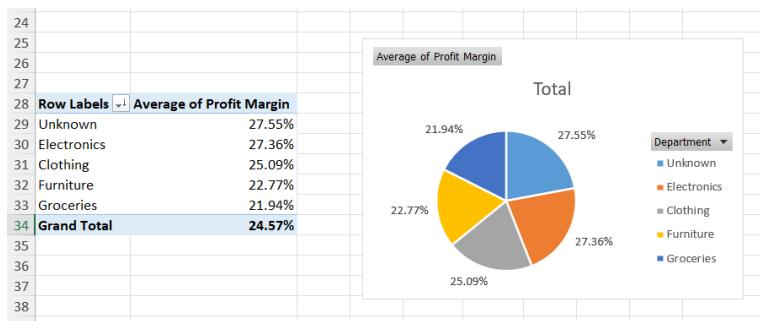
Step 8. Create Pivot Charts

- Select pivot table → Insert → PivotChart
- Recommended charts:

Column chart → Revenue by Sales Person (Client Representative)



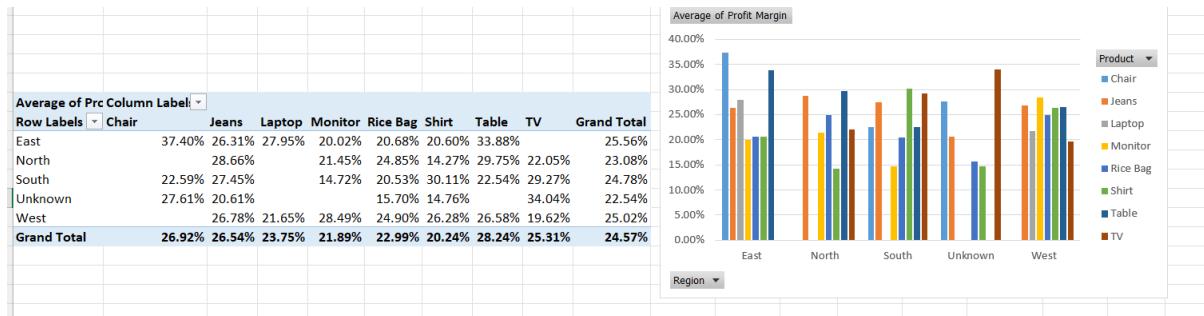
Pie chart → Avg Profit Margin by Department



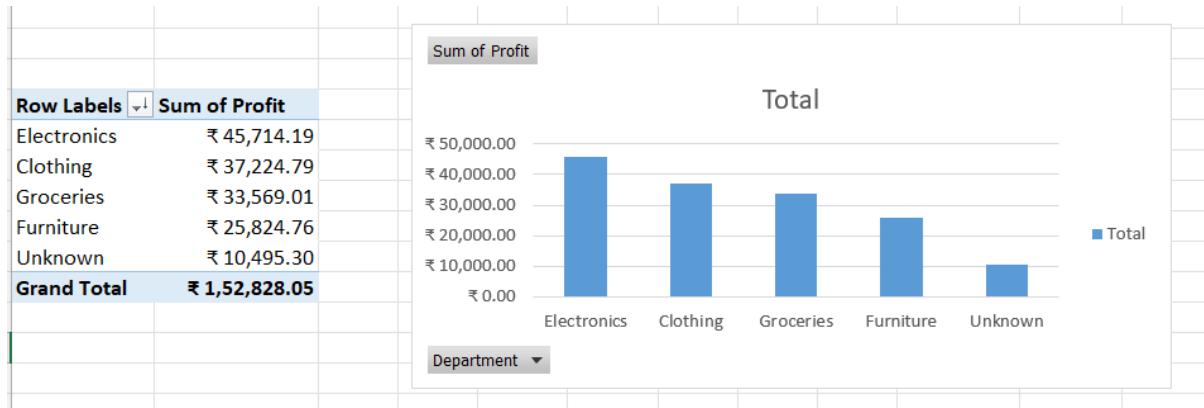
Line chart → Revenue trend over Month



Column Chart - Profit Margin by Region, Product



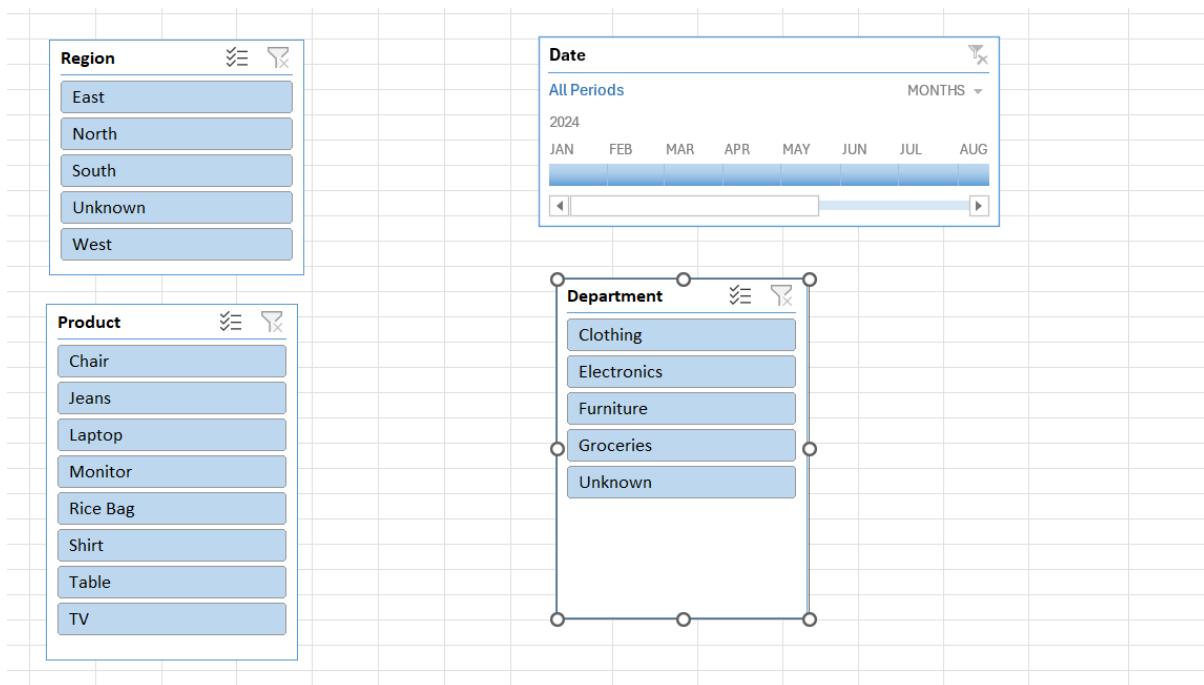
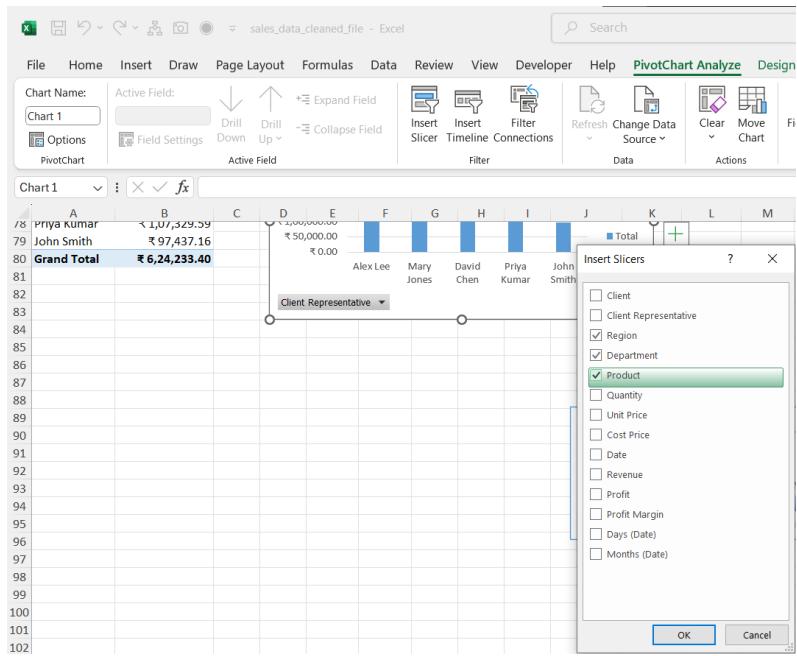
Column chart – Revenue by Department



Inserting Slicers - Region, Department, Product

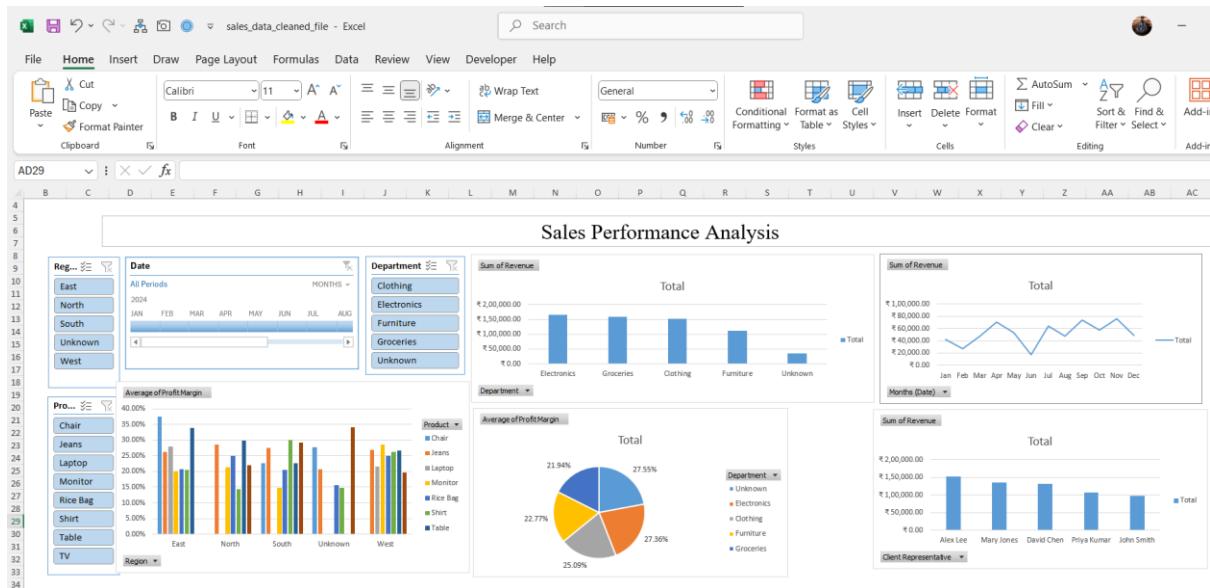
Inserting Timeline

The screenshot shows an Excel spreadsheet titled "sales_data_cleaned_file - Excel". The PivotChart ribbon tab is selected. A PivotChart is displayed on the screen with data from rows 78 to 80. The chart shows revenue by Client Representative (Alex Lee, Mary Jones, David Chen, Priya Kumar, John Smith) across different categories. An "Insert Timeline" dialog box is open, showing the "Date" option selected. The formula bar at the top shows the formula =SUMIF(\$B\$2:\$B\$100,">="&E2,\$C\$2:\$C\$100).



Step 9: Build Dashboard

1. In a new sheet, rename it to **Dashboard**.
2. Copy charts and key pivot tables to this sheet.
3. Arrange them neatly with titles and slicers



Overall Insights

These insights consider all data together:

1. Top Salesperson:
 - Alex Lee is the top performer in terms of total sales.
2. Highest Department Performance:
 - The Electronics and Groceries department has the highest average profit margin.
 - “Electronics” department total revenue.
3. Regional Performance:
 - West region leads in overall revenue.
4. Product Performance:

- Product chair is the highest.

Step 10. Save the File

1. Save the final workbook
2. This file includes:
 - Cleaned and formatted data table
 - Pivot tables and charts
 - Interactive dashboard