Advance Excel

Perform Custom Formatting – Numbers

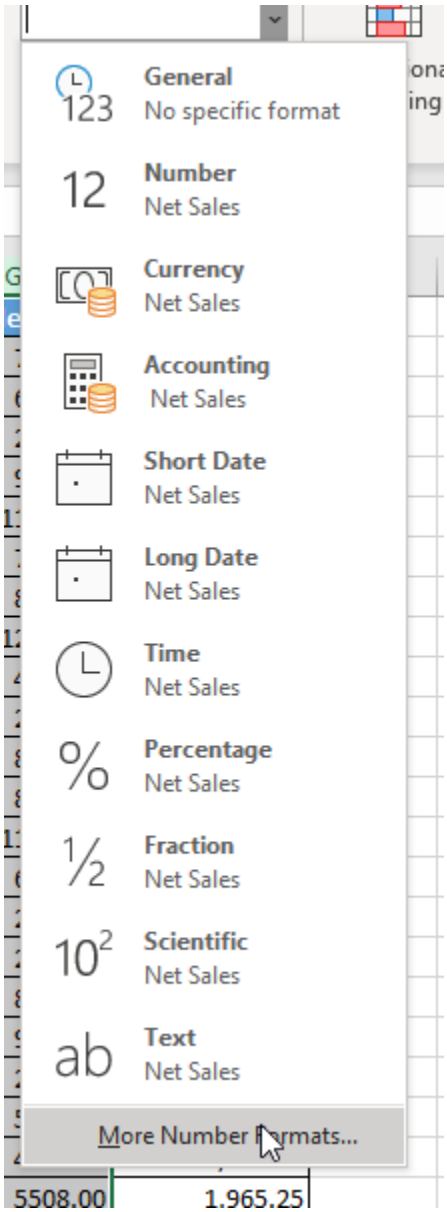
Objective: Demonstrate how to use custom formatting to format

Open the Excel file - Open the file named **Formatting.xlsx**

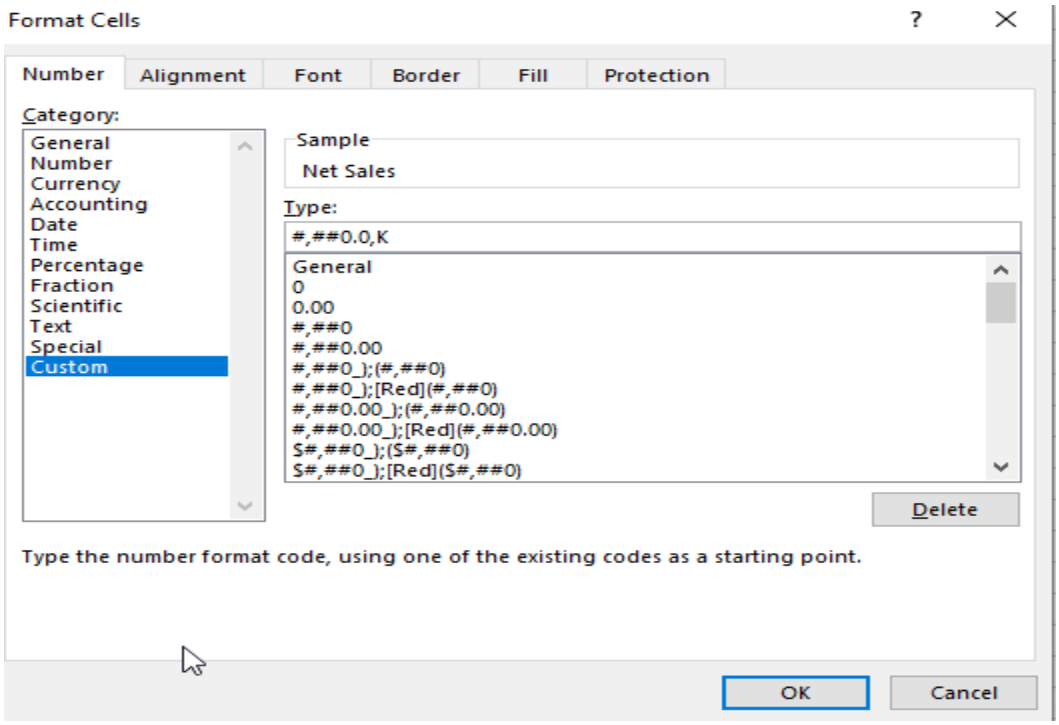
Set custom formatting on the number column - Choose the column **Net Sales**

A	B	C	D	E	F	G	H
Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
1-Jan-12	1111	Product1	Adam	North	8.00	7164.00	844.16
2-Jan-12	1112	Product2	Adam	North	8.00	6528.00	3,376.63
3-Jan-12	1113	Product3	Adam	West	8.00	2520.00	2,280.00
5-Jan-12	1115	Product2	Adam	West	10.00	9660.00	1,737.35
6-Jan-12	1111	Product3	Adam	Middle	10.00	11550.00	854.70
7-Jan-12	1117	Product1	Adam	Middle	7.00	7896.00	2,565.41
8-Jan-12	1118	Product2	Adam	Middle	7.00	8095.50	1,063.21
9-Jan-12	1119	Product3	Adam	North	8.00	12180.00	1,864.03
10-Jan-12	1111	Product1	Adam	North	6.00	4900.50	2,653.62
11-Jan-12	1121	Product2	Adam	North	9.00	2277.00	1,931.35
12-Jan-12	1122	Product3	Adam	West	6.00	8032.50	994.42
13-Jan-12	1123	Product1	Adam	West	9.00	8046.00	4,092.73
14-Jan-12	1124	Product2	Adam	West	6.00	11250.00	1,900.80
15-Jan-12	1125	Product3	Adam	Middle	7.00	6189.75	2,722.87
16-Jan-12	1126	Product1	Adam	Middle	7.00	2908.50	1,140.71
17-Jan-12	1127	Product2	Adam	Middle	6.00	2214.00	2,828.61
18-Jan-12	1128	Product3	Adam	North	9.00	8829.00	4,189.36
19-Jan-12	1129	Product1	Adam	North	10.00	9120.00	3,569.34
20-Jan-12	1130	Product2	Adam	North	6.00	2173.50	3,709.08
21-Jan-12	1131	Product3	Adam	West	10.00	5600.00	4,516.40
22-Jan-12	1132	Product1	Adam	West	6.00	4608.00	2,575.41
23-Jan-12	1133	Product2	Adam	West	8.00	5508.00	1,965.25
24-Jan-12	1134	Product3	Adam	Middle	9.00	12735.00	3,907.10
25-Jan-12	1135	Product1	Adam	Middle	10.00	13575.00	1,992.81
26-Jan-12	1136	Product2	Adam	Middle	9.00	8892.00	3,084.63
27-Jan-12	1137	Product3	Adam	North	9.00	6196.50	3,112.71
28-Jan-12	1138	Product1	Adam	North	7.00	4063.50	709.69
29-Jan-12	1139	Product2	Adam	North	9.00	4464.00	2,483.55
30-Jan-12	1140	Product3	Adam	West	10.00	10350.00	4,514.67
31-Jan-12	1141	Product1	Adam	West	10.00	8680.00	2,494.63
1-Feb-12	1142	Product2	Adam	West	9.00	13050.00	2,179.35
2-Feb-12	1143	Product3	Adam	Middle	8.00	2312.00	999.94
3-Feb-12	1144	Product1	Adam	Middle	6.00	3060.00	461.60

Click on **More Number Formats** under Format in the Home tab



Choose Custom and type **#,##0.0,K** in the Type text box. Click on OK



The formatted numbers appear as shown:

Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
1-Jan-12	1111	Product1	Adam	North	8.00	7.2K	844.16
2-Jan-12	1112	Product2	Adam	North	8.00	6.5K	3,376.63
3-Jan-12	1113	Product3	Adam	West	8.00	2.5K	2,280.00
5-Jan-12	1115	Product2	Adam	West	10.00	9.7K	1,737.35
6-Jan-12	1111	Product3	Adam	Middle	10.00	11.6K	854.70
7-Jan-12	1117	Product1	Adam	Middle	7.00	7.9K	2,565.41
8-Jan-12	1118	Product2	Adam	Middle	7.00	8.1K	1,063.21
9-Jan-12	1119	Product3	Adam	North	8.00	12.2K	1,864.03
10-Jan-12	1111	Product1	Adam	North	6.00	4.9K	2,653.62
11-Jan-12	1121	Product2	Adam	North	9.00	2.3K	1,931.35
12-Jan-12	1122	Product3	Adam	West	6.00	8.0K	994.42
13-Jan-12	1123	Product1	Adam	West	9.00	8.0K	4,092.73
14-Jan-12	1124	Product2	Adam	West	6.00	11.3K	1,900.80
15-Jan-12	1125	Product3	Adam	Middle	7.00	6.2K	2,722.87
16-Jan-12	1126	Product1	Adam	Middle	7.00	2.9K	1,140.71
17-Jan-12	1127	Product2	Adam	Middle	6.00	2.2K	2,828.61
18-Jan-12	1128	Product3	Adam	North	9.00	8.8K	4,189.36
19-Jan-12	1129	Product1	Adam	North	10.00	9.1K	3,569.34
20-Jan-12	1130	Product2	Adam	North	6.00	2.2K	3,709.08
21-Jan-12	1131	Product3	Adam	West	10.00	5.6K	4,516.40
22-Jan-12	1132	Product1	Adam	West	6.00	4.6K	2,575.41

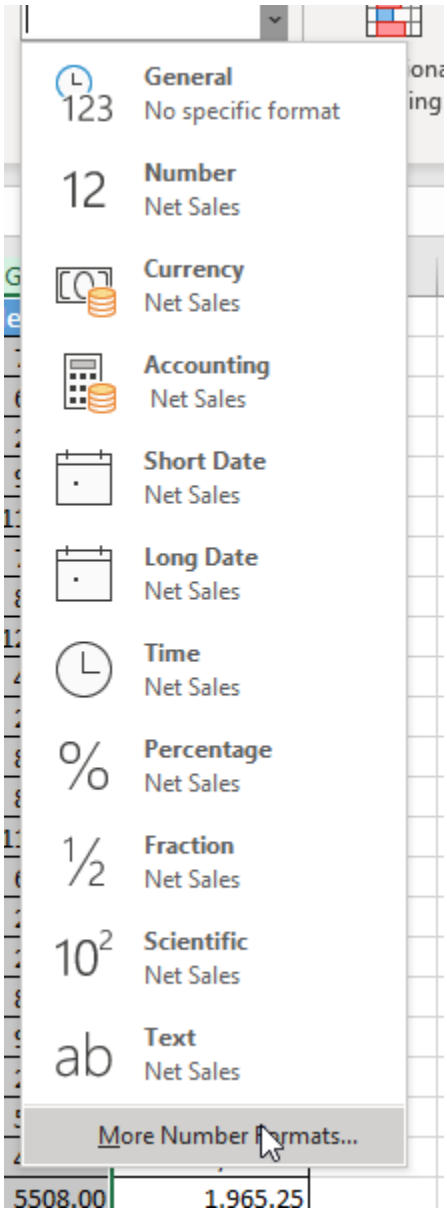
Perform Custom Formatting – Dates

Objective: Demonstrate how to use custom formatting to format dates

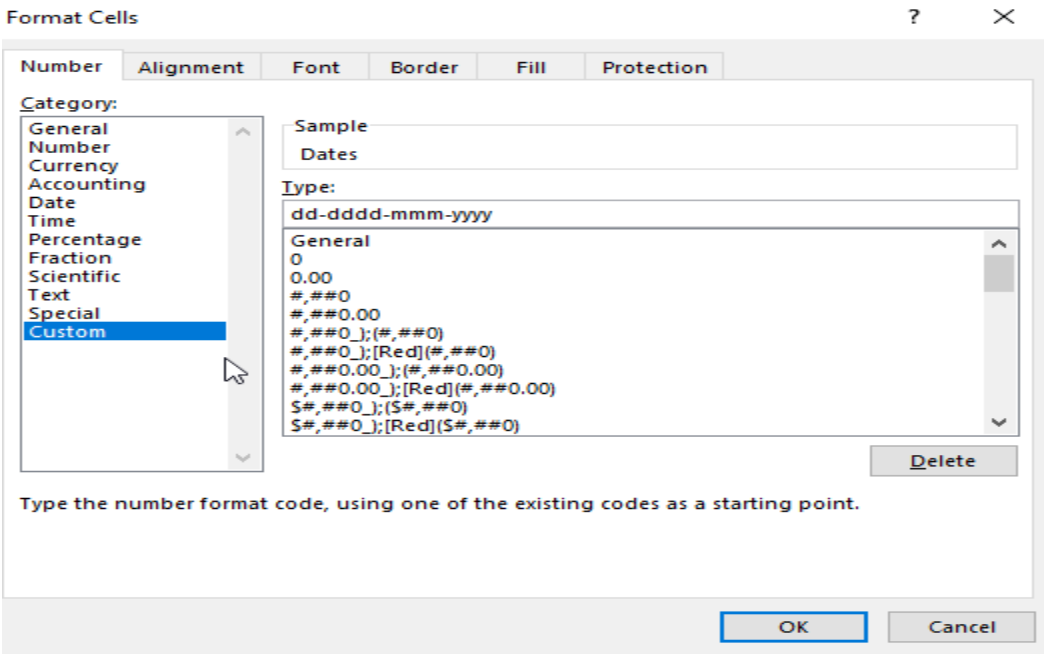
Apply custom formatting on the Date column - Choose the column **Dates**

Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
1-Jan-12	1111	Product1	Adam	North	8.00	7164.00	844.16
2-Jan-12	1112	Product2	Adam	North	8.00	6528.00	3,376.63
3-Jan-12	1113	Product3	Adam	West	8.00	2520.00	2,280.00
5-Jan-12	1115	Product2	Adam	West	10.00	9660.00	1,737.35
6-Jan-12	1111	Product3	Adam	Middle	10.00	11550.00	854.70
7-Jan-12	1117	Product1	Adam	Middle	7.00	7896.00	2,565.41
8-Jan-12	1118	Product2	Adam	Middle	7.00	8095.50	1,063.21
9-Jan-12	1119	Product3	Adam	North	8.00	12180.00	1,864.03
10-Jan-12	1111	Product1	Adam	North	6.00	4900.50	2,653.62
11-Jan-12	1121	Product2	Adam	North	9.00	2277.00	1,931.35
12-Jan-12	1122	Product3	Adam	West	6.00	8032.50	994.42
13-Jan-12	1123	Product1	Adam	West	9.00	8046.00	4,092.73
14-Jan-12	1124	Product2	Adam	West	6.00	11250.00	1,900.80
15-Jan-12	1125	Product3	Adam	Middle	7.00	6189.75	2,722.87
16-Jan-12	1126	Product1	Adam	Middle	7.00	2908.50	1,140.71
17-Jan-12	1127	Product2	Adam	Middle	6.00	2214.00	2,828.61
18-Jan-12	1128	Product3	Adam	North	9.00	8829.00	4,189.36
19-Jan-12	1129	Product1	Adam	North	10.00	9120.00	3,569.34
20-Jan-12	1130	Product2	Adam	North	6.00	2173.50	3,709.08
21-Jan-12	1131	Product3	Adam	West	10.00	5600.00	4,516.40
22-Jan-12	1132	Product1	Adam	West	6.00	4608.00	2,575.41
23-Jan-12	1133	Product2	Adam	West	8.00	5508.00	1,965.25
24-Jan-12	1134	Product3	Adam	Middle	9.00	12735.00	3,907.10
25-Jan-12	1135	Product1	Adam	Middle	10.00	13575.00	1,992.81
26-Jan-12	1136	Product2	Adam	Middle	9.00	8892.00	3,084.63
27-Jan-12	1137	Product3	Adam	North	9.00	6196.50	3,112.71
28-Jan-12	1138	Product1	Adam	North	7.00	4063.50	709.69
29-Jan-12	1139	Product2	Adam	North	9.00	4464.00	2,483.55
30-Jan-12	1140	Product3	Adam	West	10.00	10350.00	4,514.67
31-Jan-12	1141	Product1	Adam	West	10.00	8680.00	2,494.63
1-Feb-12	1142	Product2	Adam	West	9.00	13050.00	2,179.35
2-Feb-12	1143	Product3	Adam	Middle	8.00	2312.00	999.94
3-Feb-12	1144	Product1	Adam	Middle	6.00	3060.00	461.60

Click on More number formats under Format in the Home tab



Choose Custom and type dd-dddd-mmm-yyyy in the **Type** textbox. Click on OK



Expand the column with the Dates field. The formatted dates appear like below:

Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
01-Sunday-Jan-2012	1111	Product1	Adam	North	8.00	7164.00	844.16
02-Monday-Jan-2012	1112	Product2	Adam	North	8.00	6528.00	3,376.63
03-Tuesday-Jan-2012	1113	Product3	Adam	West	8.00	2520.00	2,280.00
05-Thursday-Jan-2012	1115	Product2	Adam	West	10.00	9660.00	1,737.35
06-Friday-Jan-2012	1111	Product3	Adam	Middle	10.00	11550.00	854.70
07-Saturday-Jan-2012	1117	Product1	Adam	Middle	7.00	7896.00	2,565.41
08-Sunday-Jan-2012	1118	Product2	Adam	Middle	7.00	8095.50	1,063.21
09-Monday-Jan-2012	1119	Product3	Adam	North	8.00	12180.00	1,864.03
10-Tuesday-Jan-2012	1111	Product1	Adam	North	6.00	4900.50	2,653.62
11-Wednesday-Jan-2012	1121	Product2	Adam	North	9.00	2277.00	1,931.35
12-Thursday-Jan-2012	1122	Product3	Adam	West	6.00	8032.50	994.42
13-Friday-Jan-2012	1123	Product1	Adam	West	9.00	8046.00	4,092.73
14-Saturday-Jan-2012	1124	Product2	Adam	West	6.00	11250.00	1,900.80
15-Sunday-Jan-2012	1125	Product3	Adam	Middle	7.00	6189.75	2,722.87
16-Monday-Jan-2012	1126	Product1	Adam	Middle	7.00	2908.50	1,140.71
17-Tuesday-Jan-2012	1127	Product2	Adam	Middle	6.00	2214.00	2,828.61
18-Wednesday-Jan-2012	1128	Product3	Adam	North	9.00	8829.00	4,189.36
19-Thursday-Jan-2012	1129	Product1	Adam	North	10.00	9120.00	3,569.34
20-Friday-Jan-2012	1130	Product2	Adam	North	6.00	2173.50	3,709.08
21-Saturday-Jan-2012	1131	Product3	Adam	West	10.00	5600.00	4,516.40
22-Sunday-Jan-2012	1132	Product1	Adam	West	6.00	4608.00	2,575.41
23-Monday-Jan-2012	1133	Product2	Adam	West	8.00	5508.00	1,965.25
24-Tuesday-Jan-2012	1134	Product3	Adam	Middle	9.00	12735.00	3,907.10
25-Wednesday-Jan-2012	1135	Product1	Adam	Middle	10.00	13575.00	1,992.81
26-Thursday-Jan-2012	1136	Product2	Adam	Middle	9.00	8892.00	3,084.63
27-Friday-Jan-2012	1137	Product3	Adam	North	9.00	6196.50	3,112.71
28-Saturday-Jan-2012	1138	Product1	Adam	North	7.00	4063.50	709.69
29-Sunday-Jan-2012	1139	Product2	Adam	North	9.00	4464.00	2,483.55
30-Monday-Jan-2012	1140	Product3	Adam	West	10.00	10350.00	4,514.67
31-Tuesday-Jan-2012	1141	Product1	Adam	West	10.00	8680.00	2,494.63
01-Wednesday-Feb-2012	1142	Product2	Adam	West	9.00	13050.00	2,179.35
02-Thursday-Feb-2012	1143	Product3	Adam	Middle	8.00	2312.00	999.94
03-Friday-Feb-2012	1144	Product1	Adam	Middle	6.00	3060.00	461.60

Perform Conditional Formatting: Highlight Duplicate Values

Objective: Demonstrate how to use conditional formatting to highlight duplicate values

Apply conditional formatting on the Date column - Choose the column **Order ID**

Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
1-Jan-12	1111	Product1	Adam	North	8.00	7164.00	844.16
2-Jan-12	1112	Product2	Adam	North	8.00	6528.00	3,376.63
3-Jan-12	1113	Product3	Adam	West	8.00	2520.00	2,280.00
5-Jan-12	1115	Product2	Adam	West	10.00	9660.00	1,737.35
6-Jan-12	1111	Product3	Adam	Middle	10.00	11550.00	854.70
7-Jan-12	1117	Product1	Adam	Middle	7.00	7896.00	2,565.41
8-Jan-12	1118	Product2	Adam	Middle	7.00	8095.50	1,063.21
9-Jan-12	1119	Product3	Adam	North	8.00	12180.00	1,864.03
10-Jan-12	1111	Product1	Adam	North	6.00	4900.50	2,653.62
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12-Jan-12	1122	Product3	Adam	West	6.00	8032.50	994.42
13-Jan-12	1123	Product1	Adam	West	9.00	8046.00	4,092.73
14-Jan-12	1124	Product2	Adam	West	6.00	11250.00	1,900.80
15-Jan-12	1125	Product3	Adam	Middle	7.00	6189.75	2,722.87
16-Jan-12	1126	Product1	Adam	Middle	7.00	2908.50	1,140.71
17-Jan-12	1127	Product2	Adam	Middle	6.00	2214.00	2,828.61
18-Jan-12	1128	Product3	Adam	North	9.00	8829.00	4,189.36
19-Jan-12	1129	Product1	Adam	North	10.00	9120.00	3,569.34
20-Jan-12	1130	Product2	Adam	North	6.00	2173.50	3,709.08
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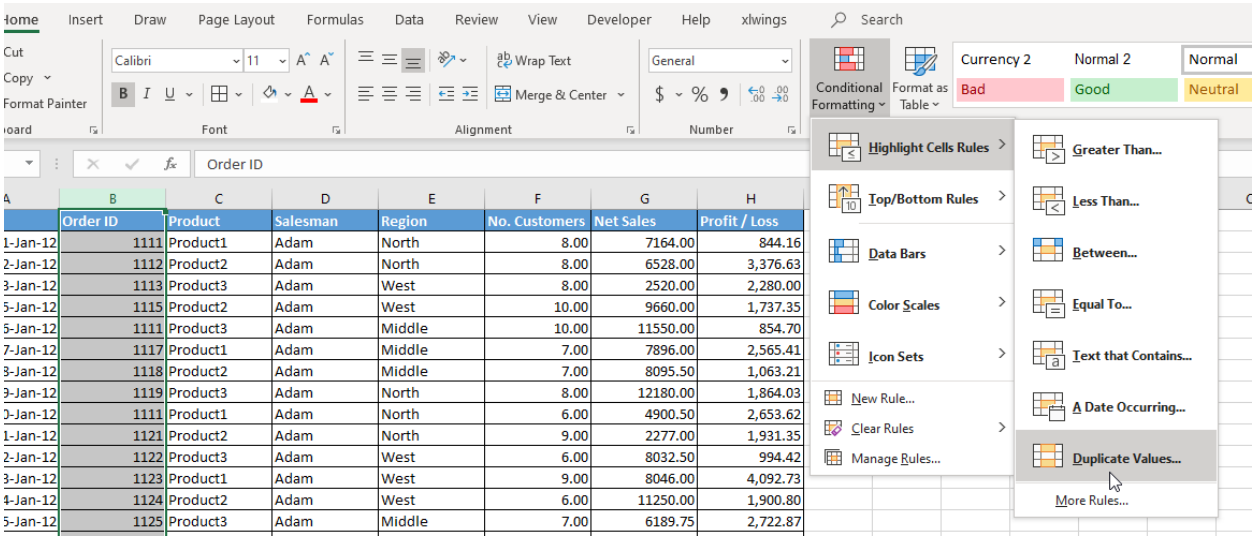
28-Jan-12	1138	Product1	Adam	North	7.00	4063.50	709.69
29-Jan-12	1139	Product2	Adam	North	9.00	4464.00	2,483.55
30-Jan-12	1140	Product3	Adam	West	10.00	10350.00	4,514.67
31-Jan-12	1141	Product1	Adam	West	10.00	8680.00	2,494.63
1-Feb-12	1142	Product2	Adam	West	9.00	13050.00	2,179.35
2-Feb-12	1143	Product3	Adam	Middle	8.00	2312.00	999.94
3-Feb-12	1144	Product1	Adam	Middle	6.00	3060.00	461.60

In the **Home** tab, under Styles panel, choose Conditional formatting. Click on Duplicate Values under Highlight Cell Rules:



	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
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0-Jan-12	1111	Product1	Adam	North	6.00	4900.50	2,653.62
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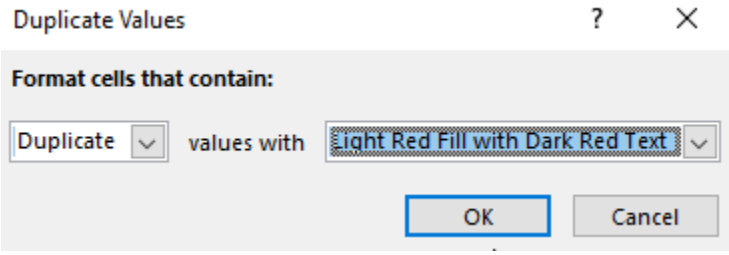
4-Jan-12	1124	Product2	Adam	West	6.00	11250.00	1,900.80
5-Jan-12	1125	Product3	Adam	Middle	7.00	6189.75	2,722.87

Choose to fill ***Duplicate*** values with ***Light Red Fill with Dark Red Text***. Click on OK



The results look like the following:

	Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
1-Jan-12	1111	Product1	Adam	North	8.00	7164.00	844.16
2-Jan-12	1112	Product2	Adam	North	8.00	6528.00	3,376.63
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16-Jan-12	1126	Product1	Adam	Middle	7.00	2908.50	1,140.71
17-Jan-12	1127	Product2	Adam	Middle	6.00	2214.00	2,828.61

The duplicate values are highlighted in light red.

Perform Conditional Formatting: Use Icon Set Rules

Objective: Demonstrate how Icon Set Rules are used

Apply conditional formatting on the Date column - Choose the column **Net Sales.** On the basis of the sales amount, apply the Icons Set rules:

- If the sales amount is greater than 8000, show a green arrow in an upward direction
- If the sales amount is between 5000 and 8000, show a yellow arrow in horizontal direction
- If the sales amount is less than 5000, show a red arrow in a downward direction

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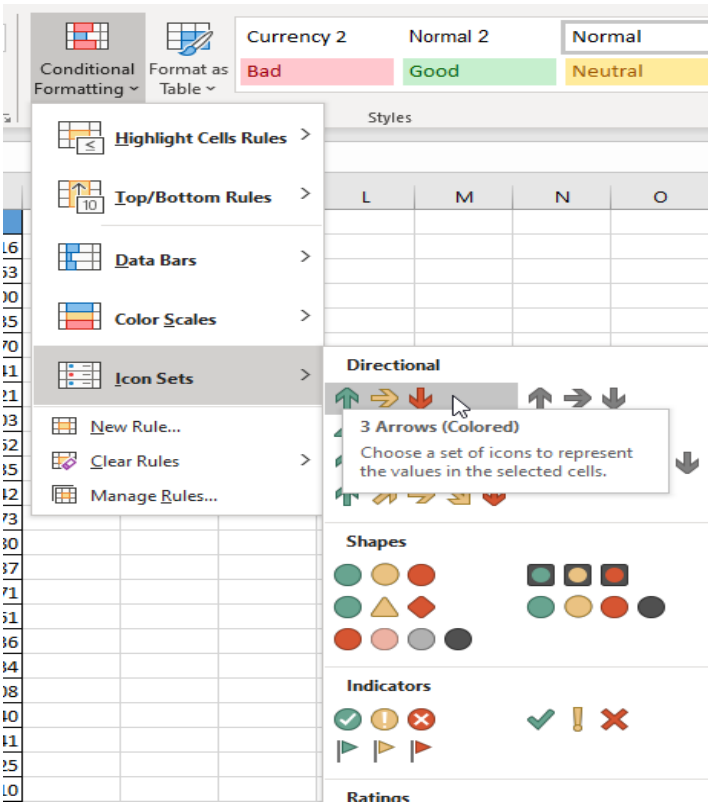
20-Jan-12	1130	Product2	Adam	North	6.00	2173.50	3,709.08
21-Jan-12	1131	Product3	Adam	West	10.00	5600.00	4,516.40
22-Jan-12	1132	Product1	Adam	West	6.00	4608.00	2,575.41
23-Jan-12	1133	Product2	Adam	West	8.00	5508.00	1,965.25
24-Jan-12	1134	Product3	Adam	Middle	9.00	12735.00	3,907.10
25-Jan-12	1135	Product1	Adam	Middle	10.00	13575.00	1,992.81
26-Jan-12	1136	Product2	Adam	Middle	9.00	8892.00	3,084.63
27-Jan-12	1137	Product3	Adam	North	9.00	6196.50	3,112.71
28-Jan-12	1138	Product1	Adam	North	7.00	4063.50	709.69
29-Jan-12	1139	Product2	Adam	North	9.00	4464.00	2,483.55
30-Jan-12	1140	Product3	Adam	West	10.00	10350.00	4,514.67
31-Jan-12	1141	Product1	Adam	West	10.00	8680.00	2,494.63
1-Feb-12	1142	Product2	Adam	West	9.00	13050.00	2,179.35
2-Feb-12	1143	Product3	Adam	Middle	8.00	2312.00	999.94
3-Feb-12	1144	Product1	Adam	Middle	6.00	3060.00	461.60

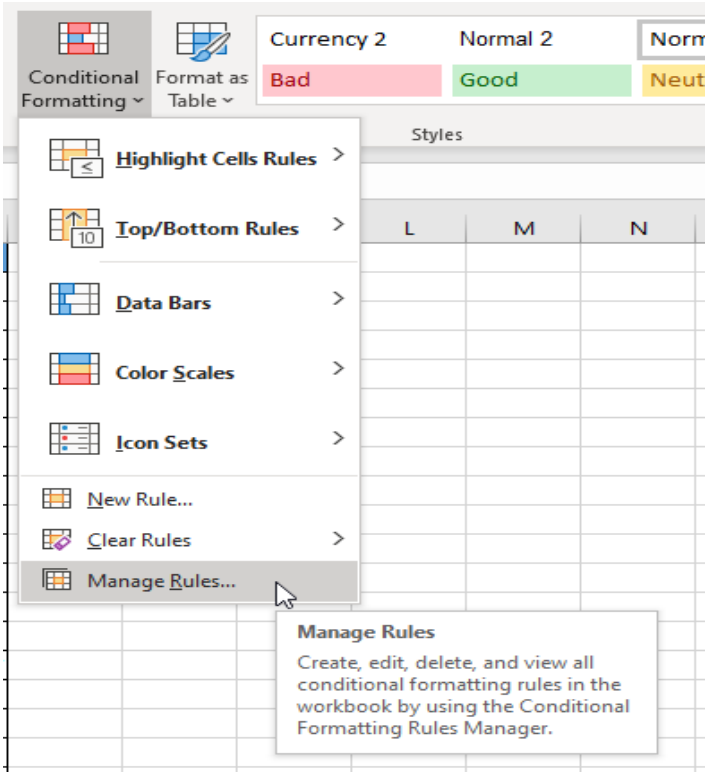
In the Home tab, under Styles panel, choose Conditional formatting. Click on the 3 arrows under Icon Set Rules:



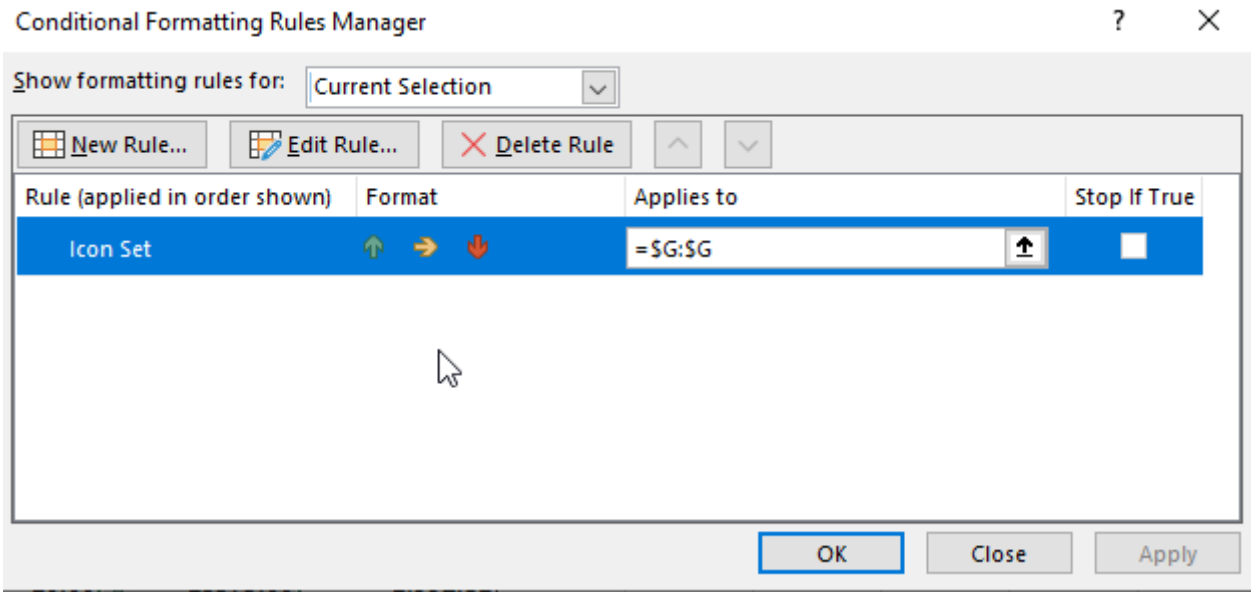
The data looks like the following:

A	B	C	D	E	F	G	H
Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
1-Jan-12	1111	Product1	Adam	North	8.00	7164.00	844.16
2-Jan-12	1112	Product2	Adam	North	8.00	6528.00	3,376.63
3-Jan-12	1113	Product3	Adam	West	8.00	2520.00	2,280.00
5-Jan-12	1115	Product2	Adam	West	10.00	9660.00	1,737.35
6-Jan-12	1111	Product3	Adam	Middle	10.00	11550.00	854.70
7-Jan-12	1117	Product1	Adam	Middle	7.00	7896.00	2,565.41
8-Jan-12	1118	Product2	Adam	Middle	7.00	8095.50	1,063.21
9-Jan-12	1119	Product3	Adam	North	8.00	12180.00	1,864.03
10-Jan-12	1111	Product1	Adam	North	6.00	4900.50	2,653.62
11-Jan-12	1121	Product2	Adam	North	9.00	2277.00	1,931.35
12-Jan-12	1122	Product3	Adam	West	6.00	8032.50	994.42
13-Jan-12	1123	Product1	Adam	West	9.00	8046.00	4,092.73
14-Jan-12	1124	Product2	Adam	West	6.00	11250.00	1,900.80
15-Jan-12	1125	Product3	Adam	Middle	7.00	6189.75	2,722.87
16-Jan-12	1126	Product1	Adam	Middle	7.00	2908.50	1,140.71
17-Jan-12	1127	Product2	Adam	Middle	6.00	2214.00	2,828.61
18-Jan-12	1128	Product3	Adam	North	9.00	8829.00	4,189.36
19-Jan-12	1129	Product1	Adam	North	10.00	9120.00	3,569.34
20-Jan-12	1130	Product2	Adam	North	6.00	2173.50	3,709.08
21-Jan-12	1131	Product3	Adam	West	10.00	5600.00	4,516.40
22-Jan-12	1132	Product1	Adam	West	6.00	4608.00	2,575.41
23-Jan-12	1133	Product2	Adam	West	8.00	5508.00	1,965.25
24-Jan-12	1134	Product3	Adam	Middle	9.00	12735.00	3,907.10
25-Jan-12	1135	Product1	Adam	Middle	10.00	13575.00	1,992.81
26-Jan-12	1136	Product2	Adam	Middle	9.00	8892.00	3,084.63

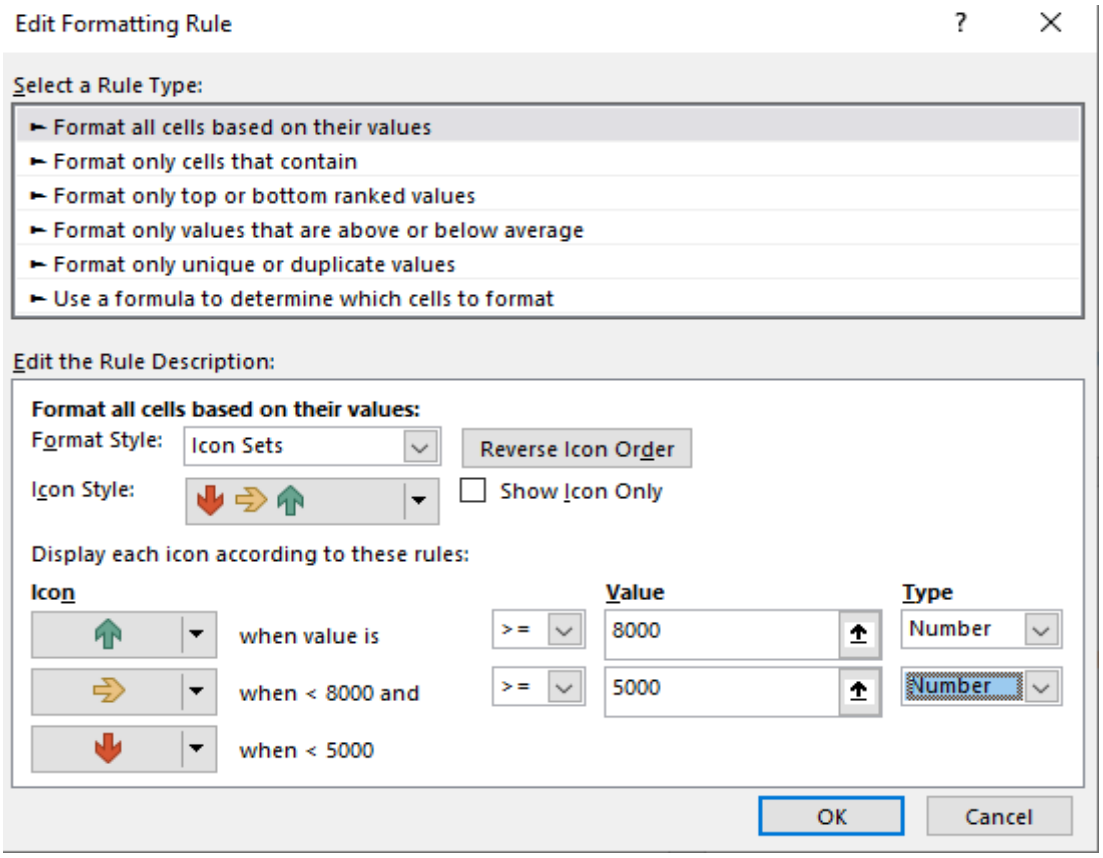
Apply the rules on the net sales amount now. Click on **Manage Rules** under the conditional formatting icon under the Styles panel of the Home tab



Click on Edit Rule and click on OK



Update the rules as shown below and click on OK. Click on OK again in the parent dialog box



The results look like the following. The icon sets are shown as below:

Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
1-Jan-12	1111	Product1	Adam	North	8.00	7164.00	844.16
2-Jan-12	1112	Product2	Adam	North	8.00	6528.00	3,376.63
3-Jan-12	1113	Product3	Adam	West	8.00	2520.00	2,280.00
5-Jan-12	1115	Product2	Adam	West	10.00	9660.00	1,737.35
6-Jan-12	1111	Product3	Adam	Middle	10.00	11550.00	854.70
7-Jan-12	1117	Product1	Adam	Middle	7.00	7896.00	2,565.41
8-Jan-12	1118	Product2	Adam	Middle	7.00	8095.50	1,063.21
9-Jan-12	1119	Product3	Adam	North	8.00	12180.00	1,864.03
10-Jan-12	1111	Product1	Adam	North	6.00	4900.50	2,653.62
11-Jan-12	1121	Product2	Adam	North	9.00	2277.00	1,931.35
12-Jan-12	1122	Product3	Adam	West	6.00	8032.50	994.42
13-Jan-12	1123	Product1	Adam	West	9.00	8046.00	4,092.73
14-Jan-12	1124	Product2	Adam	West	6.00	11250.00	1,900.80
15-Jan-12	1125	Product3	Adam	Middle	7.00	6189.75	2,722.87
16-Jan-12	1126	Product1	Adam	Middle	7.00	2908.50	1,140.71
17-Jan-12	1127	Product2	Adam	Middle	6.00	2214.00	2,828.61
18-Jan-12	1128	Product3	Adam	North	9.00	8829.00	4,189.36
19-Jan-12	1129	Product1	Adam	North	10.00	9120.00	3,569.34

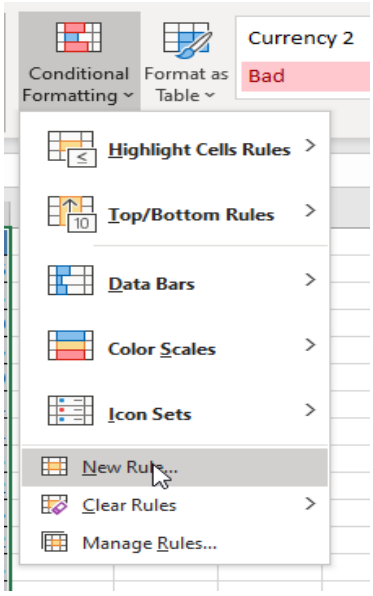
Perform Conditional Formatting: Formulas

Objective: Demonstrate how to apply conditional formatting rules with the help of formulas

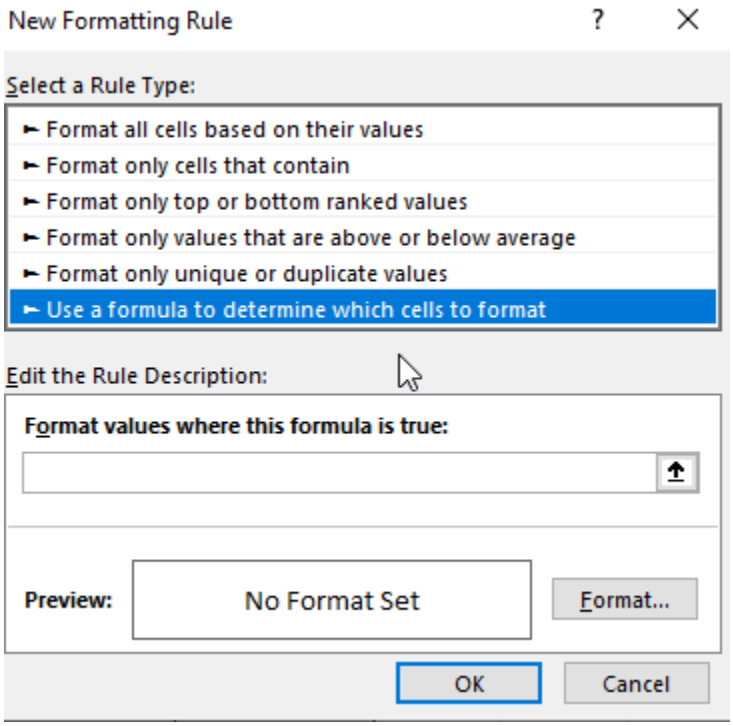
Set conditional formatting on Date column - Choose the entire dataset. The objective is to format the rows with Profit/Loss (column H) >=4000

Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
1-Jan-12	1111	Product1	Adam	North	8.00	7164.00	844.16
2-Jan-12	1112	Product2	Adam	North	8.00	6528.00	3,376.63
3-Jan-12	1113	Product3	Adam	West	8.00	2520.00	2,280.00
5-Jan-12	1115	Product2	Adam	West	10.00	9660.00	1,737.35
6-Jan-12	1111	Product3	Adam	Middle	10.00	11550.00	854.70
7-Jan-12	1117	Product1	Adam	Middle	7.00	7896.00	2,565.41
8-Jan-12	1118	Product2	Adam	Middle	7.00	8095.50	1,063.21
9-Jan-12	1119	Product3	Adam	North	8.00	12180.00	1,864.03
10-Jan-12	1111	Product1	Adam	North	6.00	4900.50	2,653.62
11-Jan-12	1121	Product2	Adam	North	9.00	2277.00	1,931.35
12-Jan-12	1122	Product3	Adam	West	6.00	8032.50	994.42
13-Jan-12	1123	Product1	Adam	West	9.00	8046.00	4,092.73
14-Jan-12	1124	Product2	Adam	West	6.00	11250.00	1,900.80
15-Jan-12	1125	Product3	Adam	Middle	7.00	6189.75	2,722.87
16-Jan-12	1126	Product1	Adam	Middle	7.00	2908.50	1,140.71
17-Jan-12	1127	Product2	Adam	Middle	6.00	2214.00	2,828.61
18-Jan-12	1128	Product3	Adam	North	9.00	8829.00	4,189.36
19-Jan-12	1129	Product1	Adam	North	10.00	9120.00	3,569.34
20-Jan-12	1130	Product2	Adam	North	6.00	2173.50	3,709.08
21-Jan-12	1131	Product3	Adam	West	10.00	5600.00	4,516.40
22-Jan-12	1132	Product1	Adam	West	6.00	4608.00	2,575.41
23-Jan-12	1133	Product2	Adam	West	8.00	5508.00	1,965.25
24-Jan-12	1134	Product3	Adam	Middle	9.00	12735.00	3,907.10
25-Jan-12	1135	Product1	Adam	Middle	10.00	13575.00	1,992.81

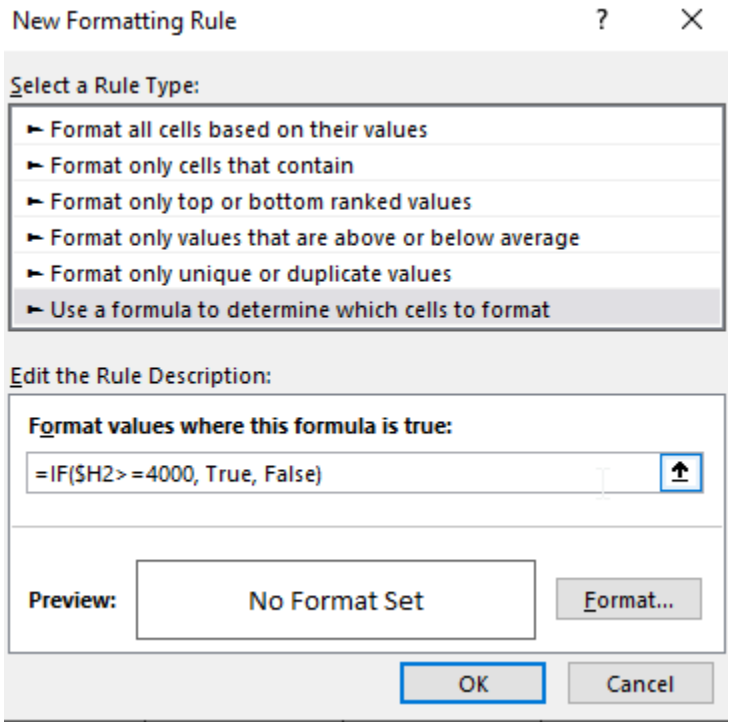
Click on **New Rule** on Conditional Formatting in the Home Tab



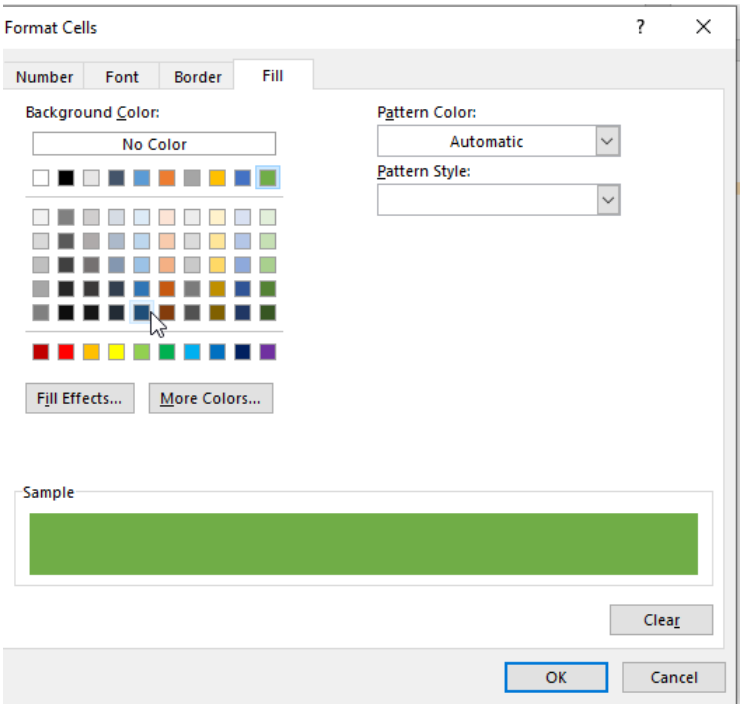
Click on **Use a formula to determine which cells to format**



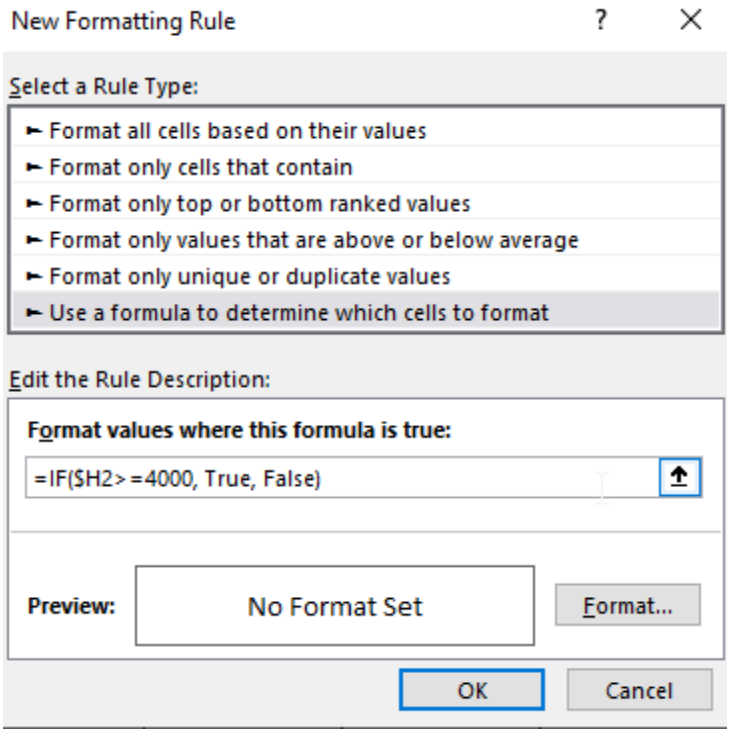
Write a new rule to check on Profit/Loss data in the rule edit box



Click on Format in the same Rule box. In the Fill tab, change Background Color to green



Click OK again



The final output looks as shown below:

A	B	C	D	E	F	G	H
Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
1-Jan-12	1111	Product1	Adam	North	8.00	7164.00	844.16
2-Jan-12	1112	Product2	Adam	North	8.00	6528.00	3,376.63
3-Jan-12	1113	Product3	Adam	West	8.00	2520.00	2,280.00
5-Jan-12	1115	Product2	Adam	West	10.00	9660.00	1,737.35
6-Jan-12	1111	Product3	Adam	Middle	10.00	11550.00	854.70
7-Jan-12	1117	Product1	Adam	Middle	7.00	7896.00	2,565.41
8-Jan-12	1118	Product2	Adam	Middle	7.00	8095.50	1,063.21
9-Jan-12	1119	Product3	Adam	North	8.00	12180.00	1,864.03
10-Jan-12	1111	Product1	Adam	North	6.00	4900.50	2,653.62
11-Jan-12	1121	Product2	Adam	North	9.00	2277.00	1,931.35
12-Jan-12	1122	Product3	Adam	West	6.00	8032.50	994.42
13-Jan-12	1123	Product1	Adam	West	9.00	8046.00	4,092.73
14-Jan-12	1124	Product2	Adam	West	6.00	11250.00	1,900.80
15-Jan-12	1125	Product3	Adam	Middle	7.00	6189.75	2,722.87
16-Jan-12	1126	Product1	Adam	Middle	7.00	2908.50	1,140.71
17-Jan-12	1127	Product2	Adam	Middle	6.00	2214.00	2,828.61
18-Jan-12	1128	Product3	Adam	North	9.00	8829.00	4,189.36
19-Jan-12	1129	Product1	Adam	North	10.00	9120.00	3,569.34
20-Jan-12	1130	Product2	Adam	North	6.00	2173.50	3,709.08
21-Jan-12	1131	Product3	Adam	West	10.00	5600.00	4,516.40
22-Jan-12	1132	Product1	Adam	West	6.00	4608.00	2,575.41
23-Jan-12	1133	Product2	Adam	West	8.00	5508.00	1,965.25
24-Jan-12	1134	Product3	Adam	Middle	9.00	12735.00	3,907.10
25-Jan-12	1135	Product1	Adam	Middle	10.00	13575.00	1,992.81
26-Jan-12	1136	Product2	Adam	Middle	9.00	8892.00	3,084.63
27-Jan-12	1137	Product3	Adam	North	9.00	6196.50	3,112.71
28-Jan-12	1138	Product1	Adam	North	7.00	4063.50	709.69

How to Use Logical Functions

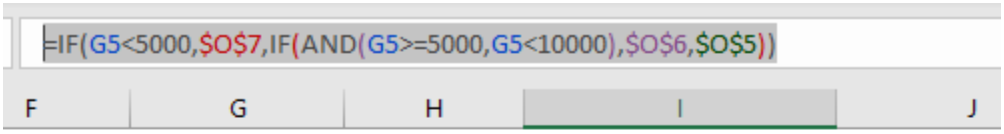
Objective: Demonstrate how to use Logical Functions in Excel

Open the Excel file - Open the file named **Logical Functions.xlsx**

Add columns with logical functions in Excel - Choose the column Commission Percentage. Enter the following formula in I5

= **IF(G5<5000,$O$7,IF(AND(G5>=5000,G5<10000),$O$6,$O$5)).**

The results should come as 2.5%

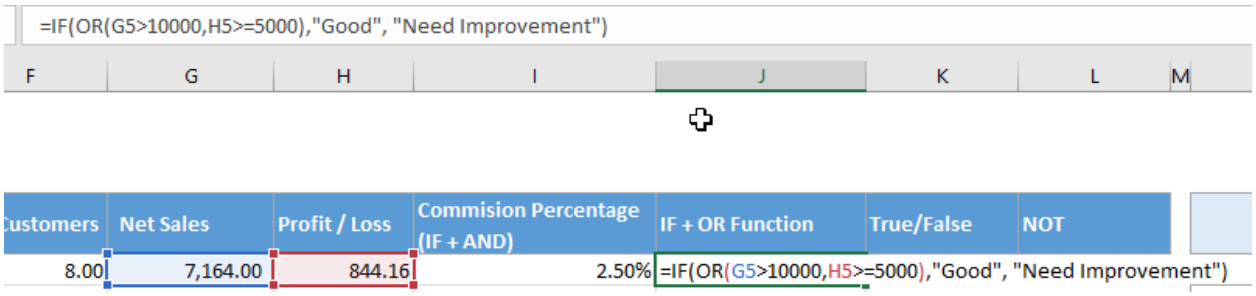


ustomers	Net Sales	Profit / Loss	Commision Percentage (IF + AND)	IF + OR Funct
8.00	7,164.00	844.16	G5<10000),$O$6,$O$5))	
8.00	6,528.00	3,376.63		
8.00	2,520.00	2,280.00		
10.00	9,660.00	1,737.35		

Copy paste the results in the rest of the cells in column I. The results looks like this

	Commision Percentage (IF + AND)	IF
5	2.50%	
3	2.50%	
0	1.50%	
5	2.50%	
0	5.00%	
1	2.50%	
1	2.50%	
3	5.00%	
2	1.50%	
5	1.50%	
2	2.50%	
3	2.50%	
0	5.00%	
7	2.50%	
1	1.50%	
1	1.50%	
5	2.50%	
4	2.50%	

In column J, enter the formula as below



Copy paste the same formula to all cells of I

tage	IF + OR Function	True/Fals
2.50%	Need Improvement	
2.50%	Need Improvement	
1.50%	Need Improvement	
2.50%	Need Improvement	
5.00%	Good	
2.50%	Need Improvement	
2.50%	Need Improvement	
5.00%	Good	
1.50%	Need Improvement	
1.50%	Need Improvement	
2.50%	Need Improvement	
2.50%	Need Improvement	
5.00%	Good	
2.50%	Need Improvement	
1.50%	Need Improvement	
1.50%	Need Improvement	
2.50%	Need Improvement	
2.50%	Need Improvement	
1.50%	Need Improvement	
2.50%	Need Improvement	
1.50%	Need Improvement	
2.50%	Need Improvement	
5.00%	Good	
5.00%	Good	
2.50%	Need Improvement	
2.50%	Need Improvement	
1.50%	Need Improvement	
1.50%	Need Improvement	

Enter TRUE and FALSE in column K

	True/False	NO
nt	TRUE	
nt	FALSE	
nt		

In column L, enter the following

	True/False	NOT
ent	TRUE	=NOT(K5)
ent	FALSE	TRUE
ent		

How to Use VLOOKUP Function

Objective: Demonstrate how to use the VLOOKUP Function in Excel

Open the Excel file - Open the file named **Vlookup,Hlookup.xlsx**

Using VLOOKUP in Excel - The data to perform VLOOKUP is given below

Order ID	Products Sold	Salesman	Net Sales
1111	Product1	Adam	7,164.0
1112	Product2	Adam	6,528.0
1113	Product3	Adam	2,520.0
1115	Product2	Adam	9,660.0
1116	Product3	Adam	11,550.0
1117	Product1	Adam	7,896.0
1118	Product2	Adam	8,095.5
1119	Product3	Adam	12,180.0
1120	Product1	Adam	4,900.5
1121	Product2	Adam	2,277.0
1122	Product3	Adam	8,032.5
1123	Product1	Adam	8,046.0
1124	Product2	Adam	11,250.0
1125	Product3	Adam	6,189.8
1126	Product1	Adam	2,908.5
1127	Product2	Adam	2,214.0
1128	Product3	Adam	8,829.0
1129	Product1	Adam	9,120.0
1130	Product2	Adam	2,173.5
1131	Product3	Adam	5,600.0
1132	Product1	Adam	4,608.0
1133	Product2	Adam	5,508.0

In Cell I2, we need to VLOOKUP OrderID 1121's sales. In I2, enter the following formula

=VLOOKUP(H2,B2:E40,4,0)

The result will look like this

	Order ID	Net Sales
Vlookup	1121	2,277.00

How to use HLOOKUP Function

Objective: Demonstrate how to use the HLOOKUP Function in Excel

Open the Excel file - Open the file named **Vlookup,Hlookup.xlsx**

Using HLOOKUP in Excel - The data to perform HLOOKUP is given below

Order ID	1111	1112	1113	1115	1116	1117	1118	1119	1120	112
Products Sold	Product1	Product2	Product3	Product2	Product3	Product1	Product2	Product3	Product1	Produ
Salesman	Adam	Adam	Adam	Adam	Adam	Adam	Adam	Adam	Adam	Ada
Net Sales	7,164.0	6,528.0	2,520.0	9,660.0	11,550.0	7,896.0	8,095.5	12,180.0	4,900.5	2,27

In Cell I4, we need to HLOOKUP OrderID 1121's sales. In I4, enter the following formula

=HLOOKUP(H4,G8:AS11,4,0)

The result will look like this

Hlookup	1121	2,277.00

How to Use MATCH Function

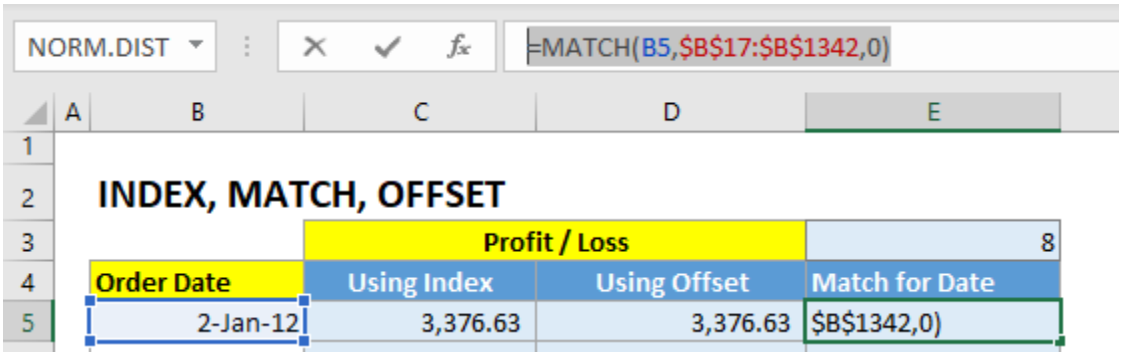
Objective: Demonstrate how to use MATCH Function in Excel

Open the Excel file - Open the file named **Index,Offset,Match.xlsx**

Using MATCH in Excel - The data to perform MATCH is given below

Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
1-Jan-12	1111	Product1	Adam	North	8.00	7,164.00	844.16
2-Jan-12	1112	Product2	Adam	North	8.00	6,528.00	3,376.63
3-Jan-12	1113	Product3	Adam	West	8.00	2,520.00	2,280.00
5-Jan-12	1115	Product2	Adam	West	10.00	9,660.00	1,737.35
6-Jan-12	1116	Product3	Adam	Middle	10.00	11,550.00	854.70
7-Jan-12	1117	Product1	Adam	Middle	7.00	7,896.00	2,565.41
8-Jan-12	1118	Product2	Adam	Middle	7.00	8,095.50	1,063.21
9-Jan-12	1119	Product3	Adam	North	8.00	12,180.00	1,864.03
10-Jan-12	1120	Product1	Adam	North	6.00	4,900.50	2,653.62
11-Jan-12	1121	Product2	Adam	North	9.00	2,277.00	1,931.35
12-Jan-12	1122	Product3	Adam	West	6.00	8,032.50	994.42

The output of MATCH needs to be stored in column E. Insert the following formula in E5 and copy upto E14 **=MATCH(B5,$B$17:$B$1342,0)**



The result will look like this

Match for Date
3
121
22
57
58
59
60
27
25
26

How to Use INDEX and OFFSET Function

Objective: Demonstrate how to use INDEX and OFFSET Function in Excel

Open the Excel file - Open the file named **Index,Offset,Match.xlsx**

Using INDEX function in Excel - The data to perform INDEX is given below

Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss
1-Jan-12	1111	Product1	Adam	North	8.00	7,164.00	844.16
2-Jan-12	1112	Product2	Adam	North	8.00	6,528.00	3,376.63
3-Jan-12	1113	Product3	Adam	West	8.00	2,520.00	2,280.00
5-Jan-12	1115	Product2	Adam	West	10.00	9,660.00	1,737.35
6-Jan-12	1116	Product3	Adam	Middle	10.00	11,550.00	854.70
7-Jan-12	1117	Product1	Adam	Middle	7.00	7,896.00	2,565.41
8-Jan-12	1118	Product2	Adam	Middle	7.00	8,095.50	1,063.21
9-Jan-12	1119	Product3	Adam	North	8.00	12,180.00	1,864.03
10-Jan-12	1120	Product1	Adam	North	6.00	4,900.50	2,653.62
11-Jan-12	1121	Product2	Adam	North	9.00	2,277.00	1,931.35
12-Jan-12	1122	Product3	Adam	West	6.00	8,032.50	994.42

Enter the column number of Profit/Loss in Cell E3

INDEX, MATCH, OFFSET

	Profit / Loss	8

Enter the following formula in C5 and copy it to column C **=INDEX($B$17:$I$1342,E5,$E$3)**

INDEX, MATCH, OFFSET

	Profit / Loss	
Order Date	Using Index	Using Of
2-Jan-12	=INDEX($B$17:$I$1342,E5,$E$3)	
1-May-13	4,207.58	4
22-Jan-12	2,575.41	2
26-Feb-12	4,693.89	4
27-Feb-12	909.81	
28-Feb-12	3,129.03	3
1-Mar-12	2,062.78	2
27-Jan-12	3,112.71	3
25-Jan-12	1,992.81	1
26-Jan-12	3,084.63	3

Enter the following formula in D5 and copy it to column D **=OFFSET($B$17,E5-1,$E$3-1)**

INDEX, MATCH, OFFSET

	Profit / Loss	
Order Date	Using Index	Using Offset
2-Jan-12	3,376.63	=OFFSET($B$17,E5-1,$E
1-May-13	4,207.58	4,207.58
22-Jan-12	2,575.41	2,575.41
26-Feb-12	4,693.89	4,693.89
27-Feb-12	909.81	909.81
28-Feb-12	3,129.03	3,129.03
1-Mar-12	2,062.78	2,062.78
27-Jan-12	3,112.71	3,112.71
25-Jan-12	1,992.81	1,992.81
26-Jan-12	3,084.63	3,084.63

The final table with index, match, and offset will look like this

INDEX, MATCH, OFFSET

	Profit / Loss		8
Order Date	Using Index	Using Offset	Match for Date
2-Jan-12	3,376.63	3,376.63	3
1-May-13	4,207.58	4,207.58	121
22-Jan-12	2,575.41	2,575.41	22
26-Feb-12	4,693.89	4,693.89	57
27-Feb-12	909.81	909.81	58
28-Feb-12	3,129.03	3,129.03	59
1-Mar-12	2,062.78	2,062.78	60
27-Jan-12	3,112.71	3,112.71	27
25-Jan-12	1,992.81	1,992.81	25
26-Jan-12	3,084.63	3,084.63	26

How to Use SUMIFS Function

Objective: Demonstrate how to use SUMIFS Function in Excel
Open the Excel file - Open the file named **Statistics functions.xlsx**

Using SUMIFS function in Excel - The data to perform SUMIFS is given below
-

Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss	Rank
1-Jan-12	1111	Product1	Adam	North	8.00	7,164.00	844.16	
2-Jan-12	1112	Product2	Adam	North	8.00	6,528.00	3,376.63	
3-Jan-12	1113	Product3	Adam	West	8.00	2,520.00	2,280.00	
5-Jan-12	1115	Product2	Adam	West	10.00	9,660.00	1,737.35	
6-Jan-12	1116	Product3	Adam	Middle	10.00	11,550.00	854.70	
7-Jan-12	1117	Product1	Adam	Middle	7.00	7,896.00	2,565.41	
8-Jan-12	1118	Product2	Adam	Middle	7.00	8,095.50	1,063.21	
9-Jan-12	1119	Product3	Adam	North	8.00	12,180.00	1,864.03	
10-Jan-12	1120	Product1	Adam	North	6.00	4,900.50	2,653.62	
11-Jan-12	1121	Product2	Adam	North	9.00	2,277.00	1,931.35	
12-Jan-12	1122	Product3	Adam	West	6.00	8,032.50	994.42	
13-Jan-12	1123	Product1	Adam	West	9.00	8,046.00	4,092.73	
14-Jan-12	1124	Product2	Adam	West	6.00	11,250.00	1,900.80	
15-Jan-12	1125	Product3	Adam	Middle	7.00	6,189.75	2,722.87	
16-Jan-12	1126	Product1	Adam	Middle	7.00	2,908.50	1,140.71	
17-Jan-12	1127	Product2	Adam	Middle	6.00	2,214.00	2,828.61	
18-Jan-12	1128	Product3	Adam	North	9.00	8,829.00	4,189.36	
19-Jan-12	1129	Product1	Adam	North	10.00	9,120.00	3,569.34	
20-Jan-12	1130	Product2	Adam	North	6.00	2,173.50	3,709.08	

Enter the following formula in N4 **=SUMIFS(H4:H1328,E4:E1328,M4)**

Formulas	Criteria	Result
Sumifs	Justin	=SUMIFS(H4:H1328,E4:E1328,M4)
Countifs	>8000	
Percentile		
Quartile		
Standard Deviation		
Median		

This will be the output

Formulas	Criteria	Result
Sumifs	Justin	1,171,745.00
Countifs	>8000	
Percentile		
Quartile		
Standard Deviation		
Median		

How to Use COUNTIFS Function

Objective: Demonstrate how to use COUNTIFS Function in Excel
Open the Excel file - Open the file named **Statistics functions.xlsx**

Using COUNTIFS function in Excel - The data to perform COUNTIFS is given below
-

Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss	Rank
1-Jan-12	1111	Product1	Adam	North	8.00	7,164.00	844.16	
2-Jan-12	1112	Product2	Adam	North	8.00	6,528.00	3,376.63	
3-Jan-12	1113	Product3	Adam	West	8.00	2,520.00	2,280.00	
5-Jan-12	1115	Product2	Adam	West	10.00	9,660.00	1,737.35	
6-Jan-12	1116	Product3	Adam	Middle	10.00	11,550.00	854.70	
7-Jan-12	1117	Product1	Adam	Middle	7.00	7,896.00	2,565.41	
8-Jan-12	1118	Product2	Adam	Middle	7.00	8,095.50	1,063.21	
9-Jan-12	1119	Product3	Adam	North	8.00	12,180.00	1,864.03	
10-Jan-12	1120	Product1	Adam	North	6.00	4,900.50	2,653.62	
11-Jan-12	1121	Product2	Adam	North	9.00	2,277.00	1,931.35	
12-Jan-12	1122	Product3	Adam	West	6.00	8,032.50	994.42	
13-Jan-12	1123	Product1	Adam	West	9.00	8,046.00	4,092.73	
14-Jan-12	1124	Product2	Adam	West	6.00	11,250.00	1,900.80	
15-Jan-12	1125	Product3	Adam	Middle	7.00	6,189.75	2,722.87	
16-Jan-12	1126	Product1	Adam	Middle	7.00	2,908.50	1,140.71	
17-Jan-12	1127	Product2	Adam	Middle	6.00	2,214.00	2,828.61	
18-Jan-12	1128	Product3	Adam	North	9.00	8,829.00	4,189.36	
19-Jan-12	1129	Product1	Adam	North	10.00	9,120.00	3,569.34	
20-Jan-12	1130	Product2	Adam	North	6.00	2,173.50	3,709.08	

Enter the following formula in N5 = **COUNTIFS(H4:H1324,M5)**

Formulas	Criteria	Result
Sumifs	Justin	1,171,745.00
Countifs	>8000	=COUNTIFS(H4:H1324,M5)
Percentile		
Quartile		
Standard Deviation		
Median		

Formulas	Criteria	Result
Sumifs	Justin	1,171,745.00
Countifs	>8000	443
Percentile		
Quartile		
Standard Deviation		
Median		

This will be the output

How to Use PERCENTILE and QUARTILE Function

Objective: Demonstrate how to use PERCENTILE and QUARTILE
Open the Excel file - Open the file named **Statistics functions.xlsx**

Using PERCENTILE function in Excel - The data to perform **PERCENTILE** is given below. We will apply **PERCENTILE** on **Net Sales**

-

Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss	Rank
1-Jan-12	1111	Product1	Adam	North	8.00	7,164.00	844.16	
2-Jan-12	1112	Product2	Adam	North	8.00	6,528.00	3,376.63	
3-Jan-12	1113	Product3	Adam	West	8.00	2,520.00	2,280.00	
5-Jan-12	1115	Product2	Adam	West	10.00	9,660.00	1,737.35	
6-Jan-12	1116	Product3	Adam	Middle	10.00	11,550.00	854.70	
7-Jan-12	1117	Product1	Adam	Middle	7.00	7,896.00	2,565.41	
8-Jan-12	1118	Product2	Adam	Middle	7.00	8,095.50	1,063.21	
9-Jan-12	1119	Product3	Adam	North	8.00	12,180.00	1,864.03	
10-Jan-12	1120	Product1	Adam	North	6.00	4,900.50	2,653.62	
11-Jan-12	1121	Product2	Adam	North	9.00	2,277.00	1,931.35	
12-Jan-12	1122	Product3	Adam	West	6.00	8,032.50	994.42	
13-Jan-12	1123	Product1	Adam	West	9.00	8,046.00	4,092.73	
14-Jan-12	1124	Product2	Adam	West	6.00	11,250.00	1,900.80	
15-Jan-12	1125	Product3	Adam	Middle	7.00	6,189.75	2,722.87	
16-Jan-12	1126	Product1	Adam	Middle	7.00	2,908.50	1,140.71	
17-Jan-12	1127	Product2	Adam	Middle	6.00	2,214.00	2,828.61	
18-Jan-12	1128	Product3	Adam	North	9.00	8,829.00	4,189.36	
19-Jan-12	1129	Product1	Adam	North	10.00	9,120.00	3,569.34	
20-Jan-12	1130	Product2	Adam	North	6.00	2,173.50	3,709.08	

Enter the following formula in N6 **=PERCENTILE(H4:H1328,0.4)**

Formulas	Criteria	Result
Sumifs	Justin	1,171,745.00
Countifs	>8000	443
Percentile		=PERCENTILE(H4:H1328,0.4)
Quartile		
Standard Deviation		
Median		

Formulas	Criteria	Result
Sumifs	Justin	1,171,745.00
Countifs	>8000	443
Percentile		5,220.00
Quartile		
Standard Deviation		
Median		

The output is given below:

Using QUARTILE function in Excel - Enter the following function in N7 = **QUARTILE(H4:H1328,1)**

Formulas	Criteria	Result
Sumifs	Justin	1,171,745.00
Countifs	>8000	443
Percentile		5,220.00
Quartile		=QUARTILE(H4:H1328,1)
Standard Deviation		
Median		

The output is shown below:

Formulas	Criteria	Result
Sumifs	Justin	1,171,745.00
Countifs	>8000	443
Percentile		5,220.00
Quartile		3,822.00
Standard Deviation		
Median		

How to Use STDEV, MEDIAN, and RANK Functions

Objective: Demonstrate how to use STDEV, MEDIAN, and RANK Functions in Excel

Open the Excel file - Open the file named **Statistics functions.xlsx**

Using STDEV function in Excel - The data to perform Percentile is below. We will apply Percentile on **Net Sales**

-

Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss	Rank
1-Jan-12	1111	Product1	Adam	North	8.00	7,164.00	844.16	
2-Jan-12	1112	Product2	Adam	North	8.00	6,528.00	3,376.63	
3-Jan-12	1113	Product3	Adam	West	8.00	2,520.00	2,280.00	
5-Jan-12	1115	Product2	Adam	West	10.00	9,660.00	1,737.35	
6-Jan-12	1116	Product3	Adam	Middle	10.00	11,550.00	854.70	
7-Jan-12	1117	Product1	Adam	Middle	7.00	7,896.00	2,565.41	
8-Jan-12	1118	Product2	Adam	Middle	7.00	8,095.50	1,063.21	
9-Jan-12	1119	Product3	Adam	North	8.00	12,180.00	1,864.03	
10-Jan-12	1120	Product1	Adam	North	6.00	4,900.50	2,653.62	
11-Jan-12	1121	Product2	Adam	North	9.00	2,277.00	1,931.35	
12-Jan-12	1122	Product3	Adam	West	6.00	8,032.50	994.42	
13-Jan-12	1123	Product1	Adam	West	9.00	8,046.00	4,092.73	
14-Jan-12	1124	Product2	Adam	West	6.00	11,250.00	1,900.80	
15-Jan-12	1125	Product3	Adam	Middle	7.00	6,189.75	2,722.87	
16-Jan-12	1126	Product1	Adam	Middle	7.00	2,908.50	1,140.71	
17-Jan-12	1127	Product2	Adam	Middle	6.00	2,214.00	2,828.61	
18-Jan-12	1128	Product3	Adam	North	9.00	8,829.00	4,189.36	
19-Jan-12	1129	Product1	Adam	North	10.00	9,120.00	3,569.34	
20-Jan-12	1130	Product2	Adam	North	6.00	2,173.50	3,709.08	

Enter the following formula in N8 **=STDEV(H4:H1328)**

Formulas	Criteria	Result
Sumifs	Justin	1,171,745.00
Countifs	>8000	443
Percentile		5,220.00
Quartile		3,822.00
Standard Deviation		=STDEV(H4:H1328)
Median		

The output looks like the following:

Formulas	Criteria	Result
Sumifs	Justin	1,171,745.00
Countifs	>8000	443
Percentile		5,220.00
Quartile		3,822.00
Standard Deviation		3,455.7
Median		

Using MEDIAN function in Excel - Enter the following formula in N9 **=MEDIAN(H4:H1328)**

Formulas	Criteria	Result
Sumifs	Justin	1,171,745.00
Countifs	>8000	443
Percentile		5,220.00
Quartile		3,822.00
Standard Deviation		3,455.7
Median		=MEDIAN(H4:H1328)

The output looks like below:

Formulas	Criteria	Result
Sumifs	Justin	1,171,745.00
Countifs	>8000	443
Percentile		5,220.00
Quartile		3,822.00
Standard Deviation		3,455.7
Median		6,192.0

Using RANK function in Excel - Enter the following formula in J4 and copy it to all other cells in J **=RANK(H4,$H$4:$H$1328,0)**

mers	Net Sales	Profit / Loss	Rank	Formulas
8.00	7,164.00	844.16	=RANK(H4,$H$4:$H$1328,0)	
8.00	6,528.00	3,376.63	627	Countifs
8.00	2,520.00	2,280.00	1096	Percentile

The Rank appears as shown below:

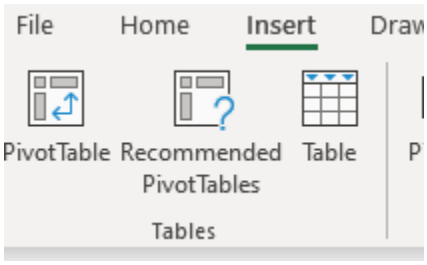
Dates	Order ID	Product	Salesman	Region	No. Customers	Net Sales	Profit / Loss	Rank
1-Jan-12	1111	Product1	Adam	North	8.00	7,164.00	844.16	553
2-Jan-12	1112	Product2	Adam	North	8.00	6,528.00	3,376.63	627
3-Jan-12	1113	Product3	Adam	West	8.00	2,520.00	2,280.00	1096
5-Jan-12	1115	Product2	Adam	West	10.00	9,660.00	1,737.35	276
6-Jan-12	1116	Product3	Adam	Middle	10.00	11,550.00	854.70	127
7-Jan-12	1117	Product1	Adam	Middle	7.00	7,896.00	2,565.41	460
8-Jan-12	1118	Product2	Adam	Middle	7.00	8,095.50	1,063.21	436
9-Jan-12	1119	Product3	Adam	North	8.00	12,180.00	1,864.03	97
10-Jan-12	1120	Product1	Adam	North	6.00	4,900.50	2,653.62	843
11-Jan-12	1121	Product2	Adam	North	9.00	2,277.00	1,931.35	1147
12-Jan-12	1122	Product3	Adam	West	6.00	8,032.50	994.42	442
13-Jan-12	1123	Product1	Adam	West	9.00	8,046.00	4,092.73	440
14-Jan-12	1124	Product2	Adam	West	6.00	11,250.00	1,900.80	145
15-Jan-12	1125	Product3	Adam	Middle	7.00	6,189.75	2,722.87	664
16-Jan-12	1126	Product1	Adam	Middle	7.00	2,908.50	1,140.71	1060
17-Jan-12	1127	Product2	Adam	Middle	6.00	2,214.00	2,828.61	1166
18-Jan-12	1128	Product3	Adam	North	9.00	8,829.00	4,189.36	349
19-Jan-12	1129	Product1	Adam	North	10.00	9,120.00	3,569.34	315
20-Jan-12	1130	Product2	Adam	North	6.00	2,173.50	3,709.08	1184

Create PivotTable

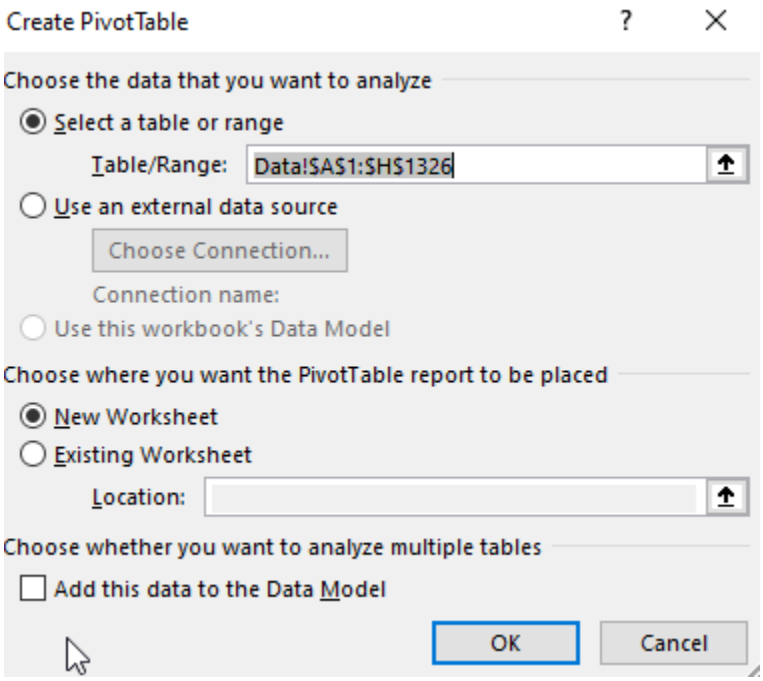
Objective: Demonstrate how to create a PivotTable and customize it

Open the Excel file - Open the file named **Pivot Table.xlsx** and worksheet **Data**

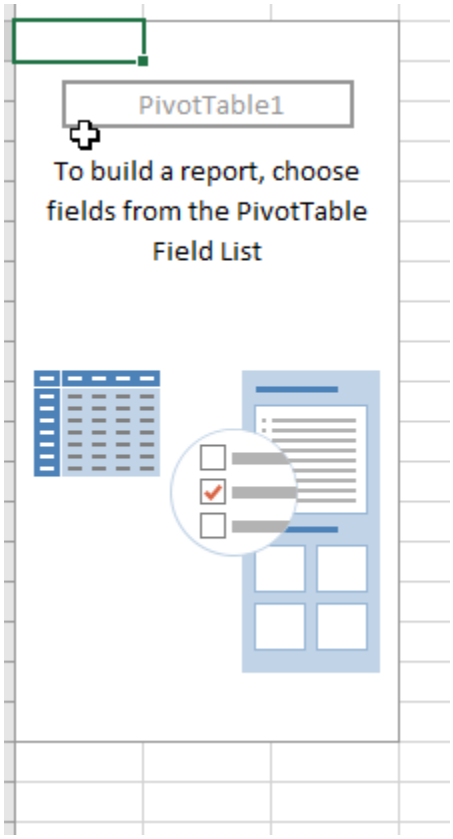
Creating a pivot table - Click on **PivotTable** under the Insert tab

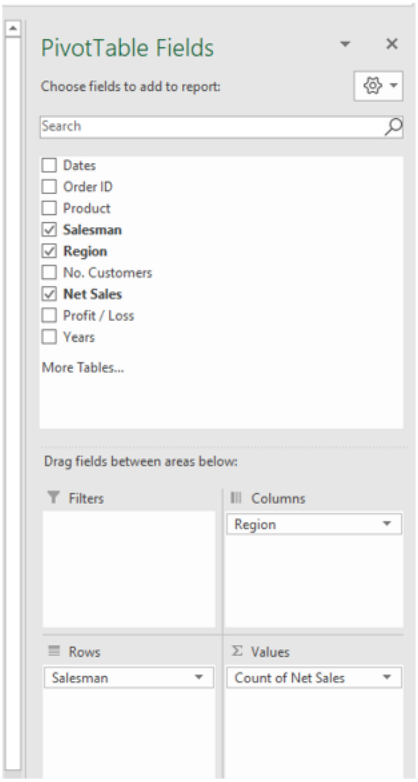


In the Create PivotTable dialog, select the input range and choose a **New Worksheet** for the pivot table

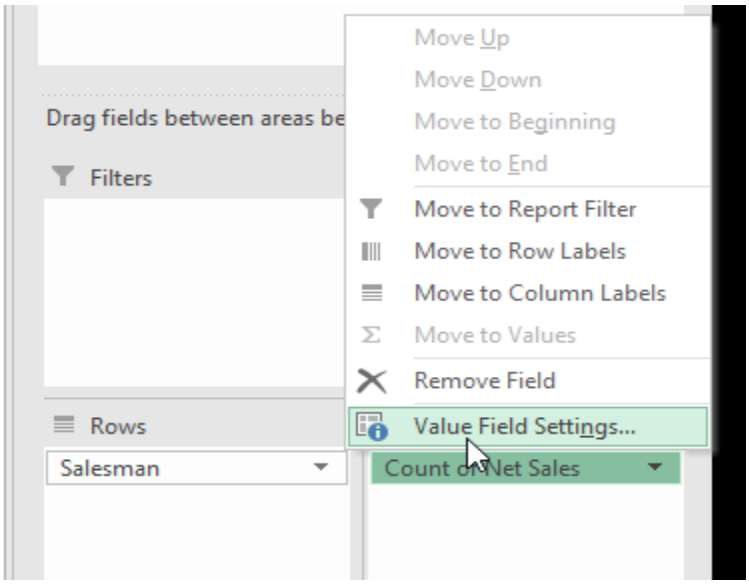


Click on the Pivot table in the new sheet to get the Fields list. Choose Pivot fields as given below

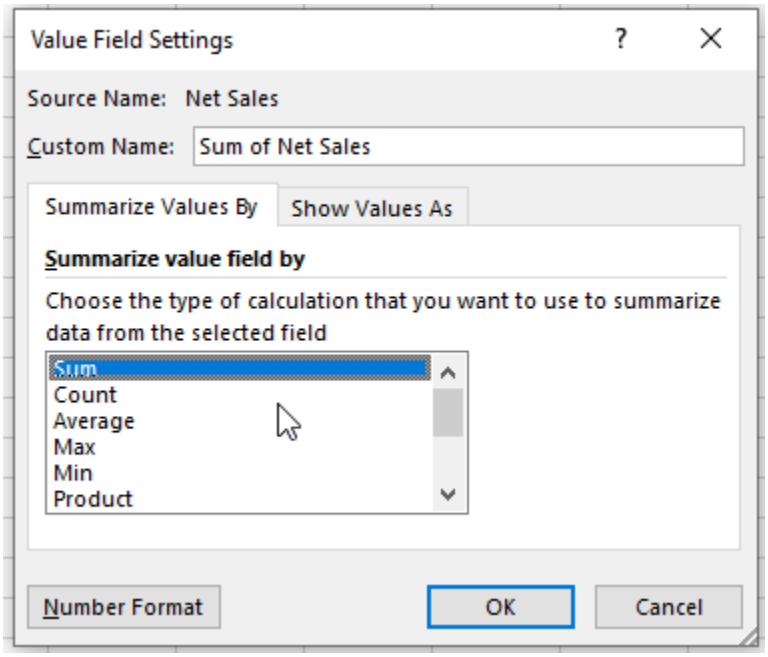




Click on Value Field Settings in **Count of Net Sales**



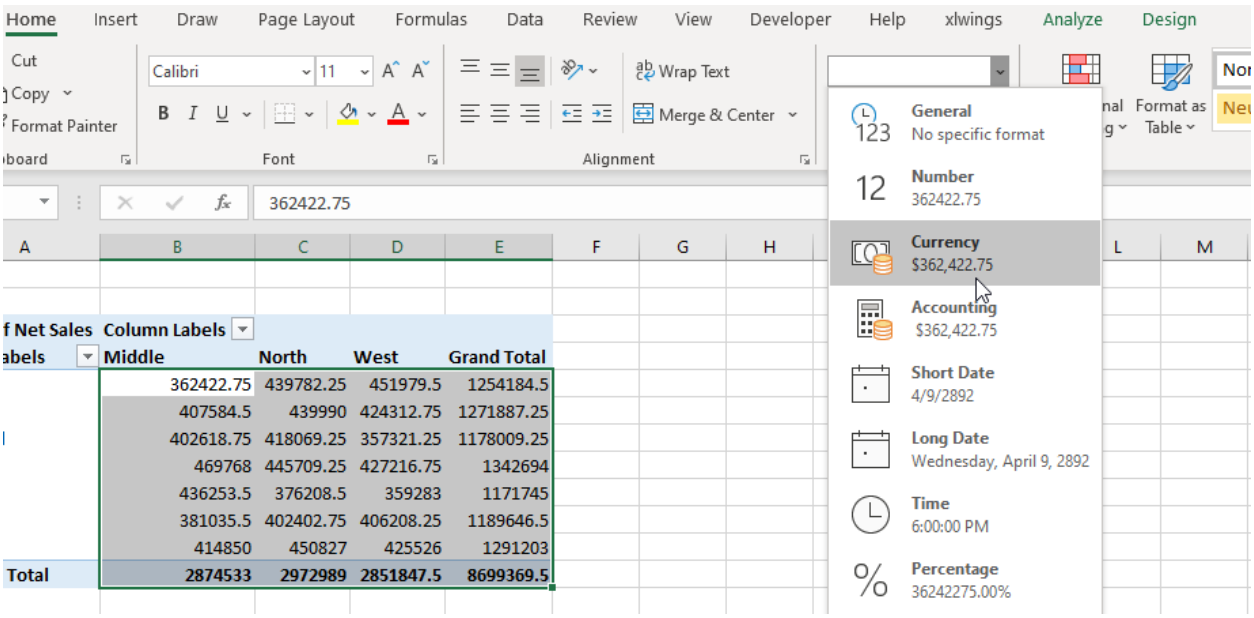
Choose **Sum** and click **OK**



The output of the new sheet looks like the following

Sum of Net Sales	Column Labels			
Row Labels	Middle	North	West	Grand Total
Adam	362422.75	439782.25	451979.5	1254184.5
Calvin	407584.5	439990	424312.75	1271887.25
Daniel	402618.75	418069.25	357321.25	1178009.25
Henry	469768	445709.25	427216.75	1342694
Justin	436253.5	376208.5	359283	1171745
Paul	381035.5	402402.75	406208.25	1189646.5
Sindy	414850	450827	425526	1291203
Grand Total	**2874533**	**2972989**	**2851847.5**	**8699369.5**

Change the formatting to **Currency**



The final sheet looks like the following:

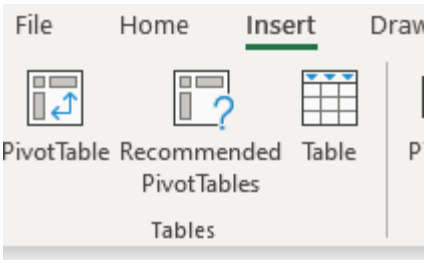
Sum of Net Sales	Column Labels			
Row Labels	Middle	North	West	Grand Total
Adam	$362,422.75	$439,782.25	$451,979.50	$1,254,184.50
Calvin	$407,584.50	$439,990.00	$424,312.75	$1,271,887.25
Daniel	$402,618.75	$418,069.25	$357,321.25	$1,178,009.25
Henry	$469,768.00	$445,709.25	$427,216.75	$1,342,694.00
Justin	$436,253.50	$376,208.50	$359,283.00	$1,171,745.00
Paul	$381,035.50	$402,402.75	$406,208.25	$1,189,646.50
Sindy	$414,850.00	$450,827.00	$425,526.00	$1,291,203.00
Grand Total	**$2,874,533.00**	**$2,972,989.00**	**$2,851,847.50**	**$8,699,369.50**

Perform Grouping in PivotTable

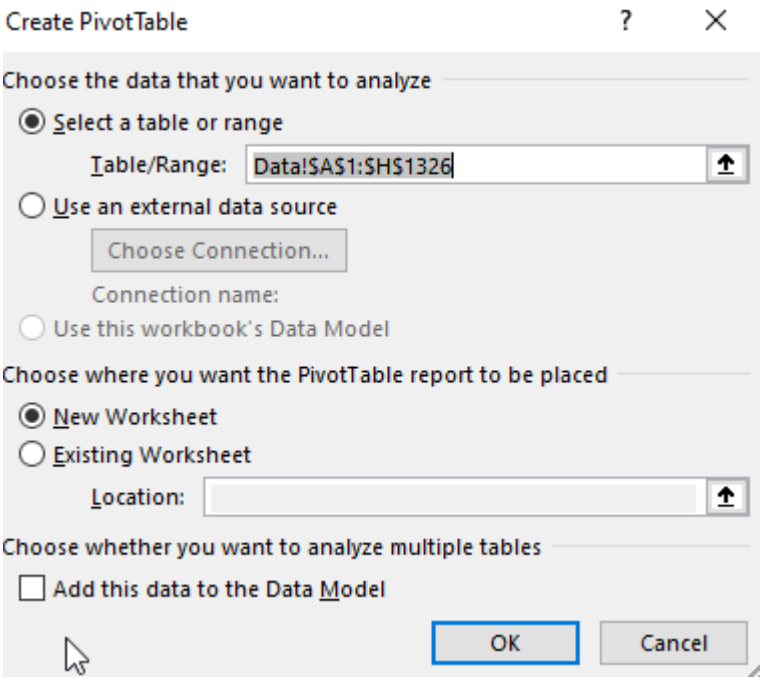
Objective: Demonstrate how to perform grouping in a PivotTable

Open the Excel file - Open the file named **Pivot Table.xlsx** and worksheet **Data**

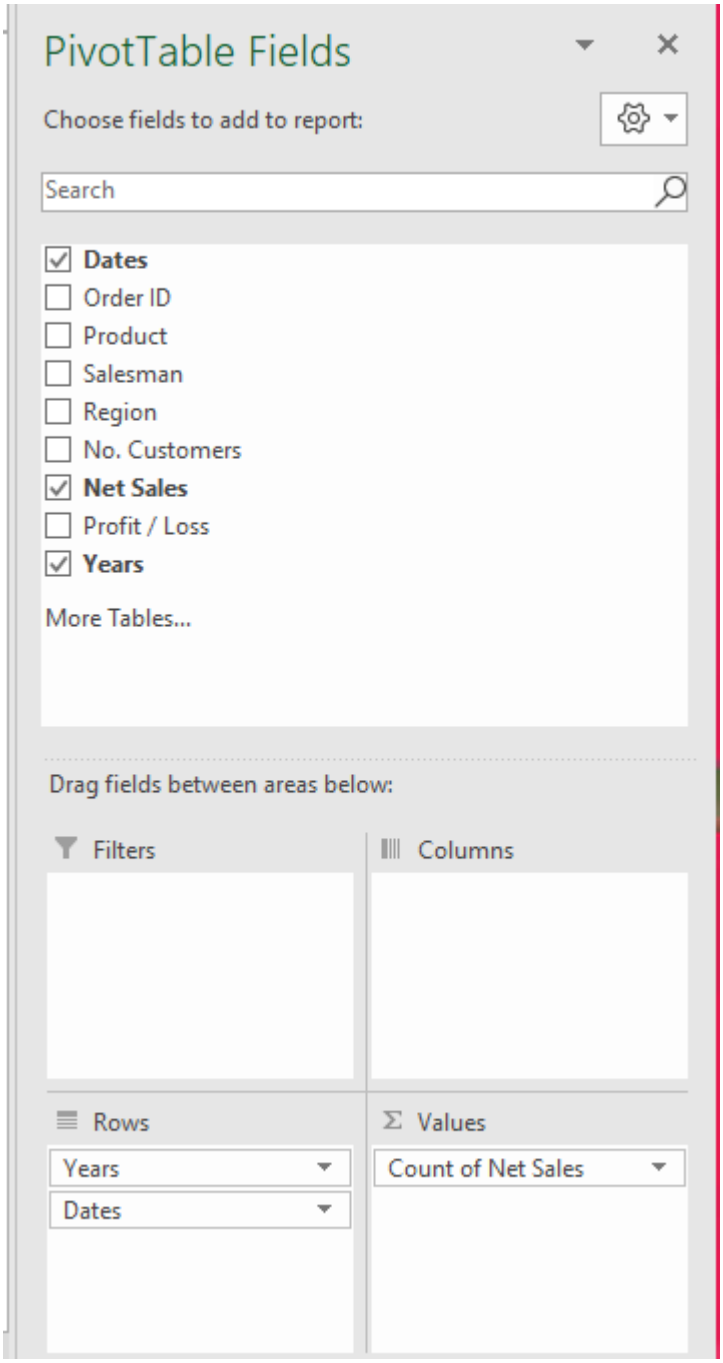
Creating a pivot table - Click on **PivotTable** under the Insert tab



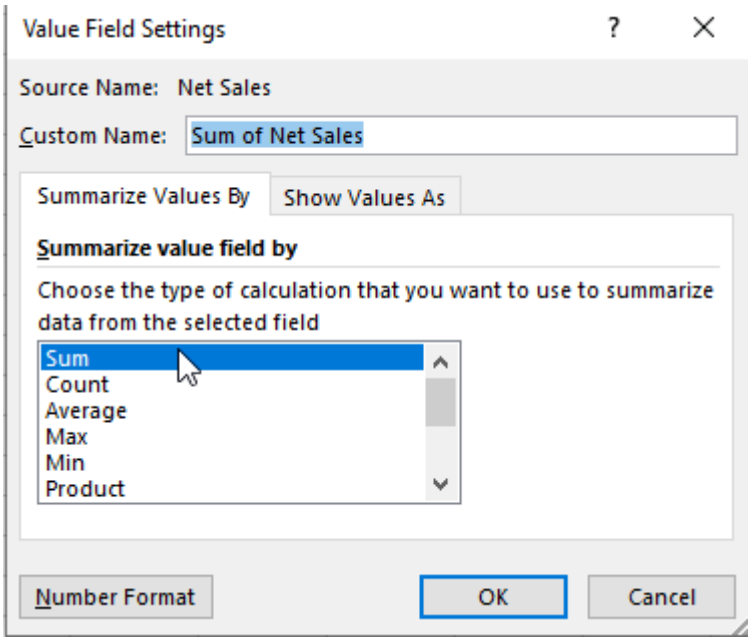
In the **Create PivotTable** dialog, select the input range and choose a **New Worksheet** for the pivot table



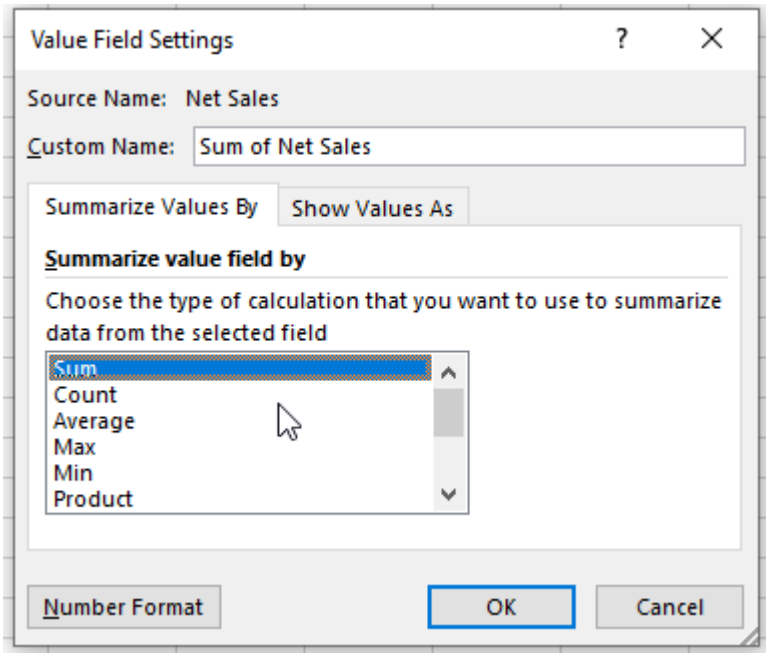
Click on the Pivot table in the new sheet to get the Fields list. Choose Pivot fields as shown below. The Rows should be **Years** and **Dates**. The Value should be **Count of Net Sales**

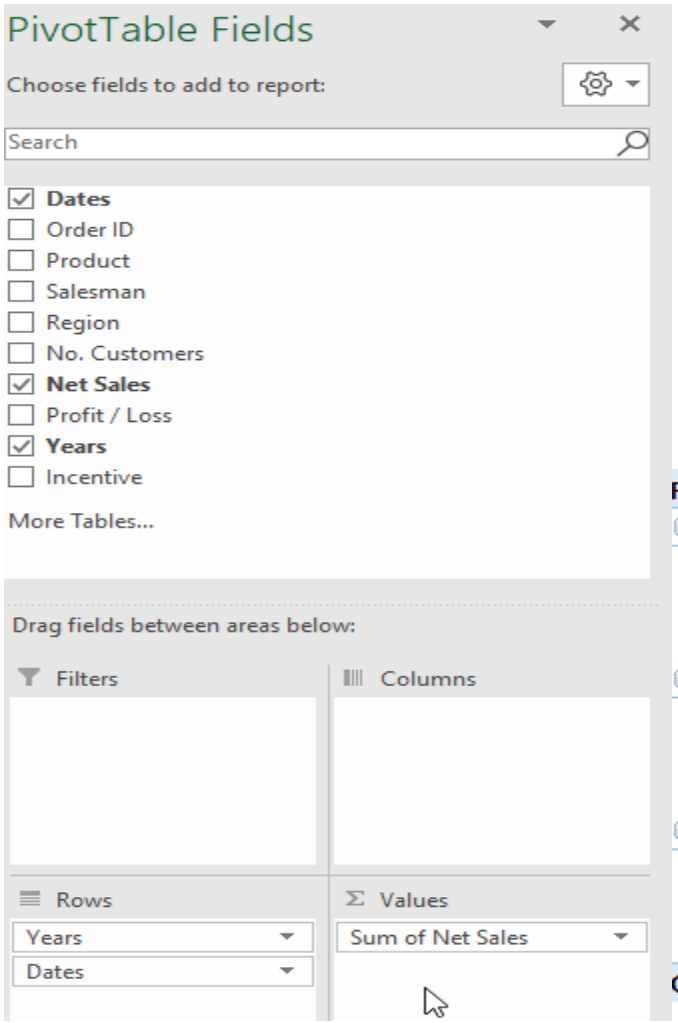


Click on **Value Field Settings** in Net Sales



Choose **Sum** and click **OK**





Row Labels	Sum of Net Sales
2012	
Jan	1414604.25
Feb	1304587.75
Mar	244813
2013	
Mar	1216505.25
Apr	1386844.25
May	297376.75
2014	
May	1061721
Jun	1322017.25
Jul	450900
Grand Total	8699369.5

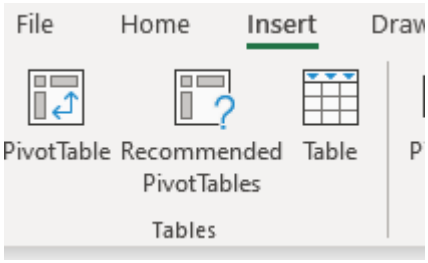
The output of the new pivot sheet looks like the following

How to Perform Custom Calculation

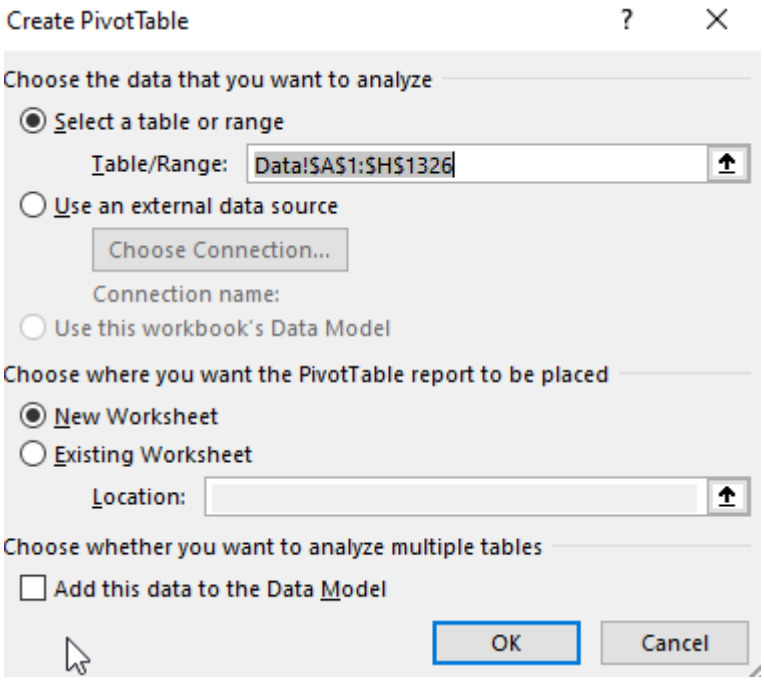
Objective: Demonstrate how to perform custom calculations in a PivotTable

Open the Excel file - Open the file named **Pivot Table.xlsx** and worksheet **Data**

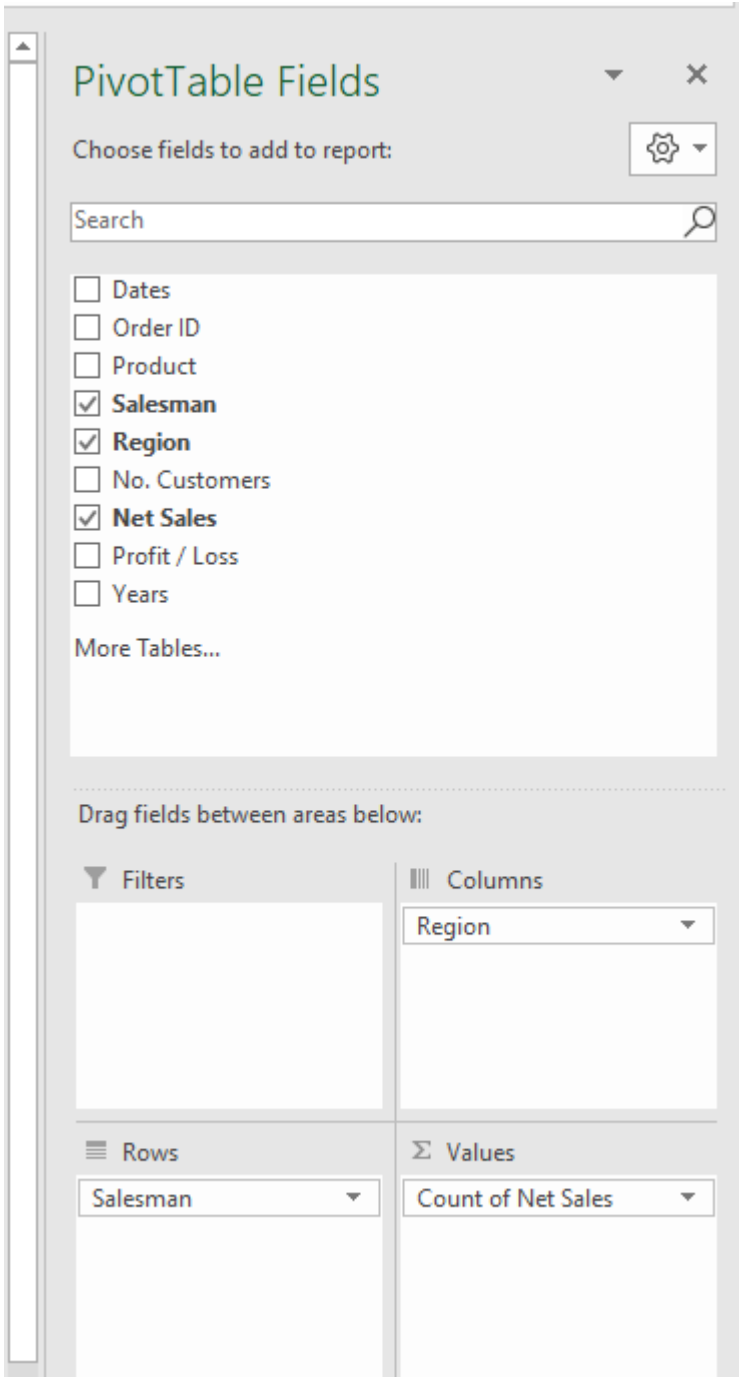
Create a pivot table - Go to the Insert tab and click on the PivotTable drop down. Click on the drop-down and select **From Table/Range**



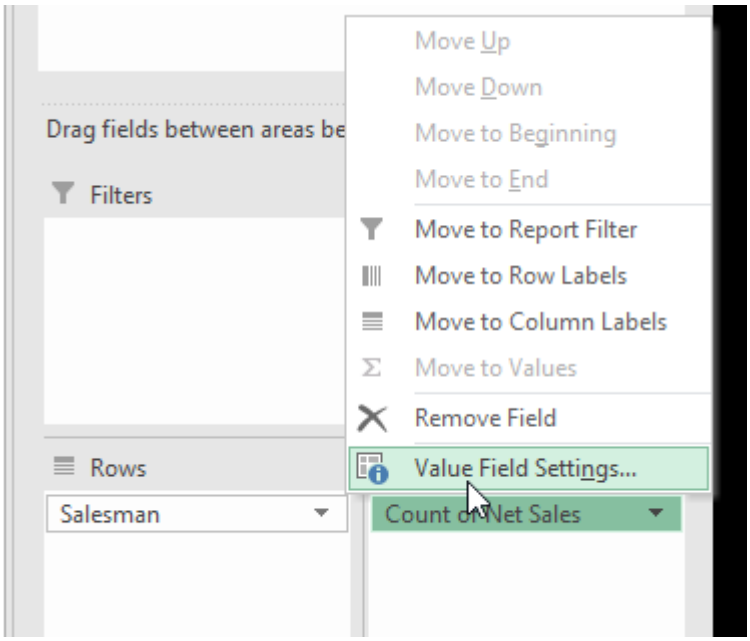
In the Create PivotTable dialog, select the input range and choose a **New Worksheet** for the pivot table



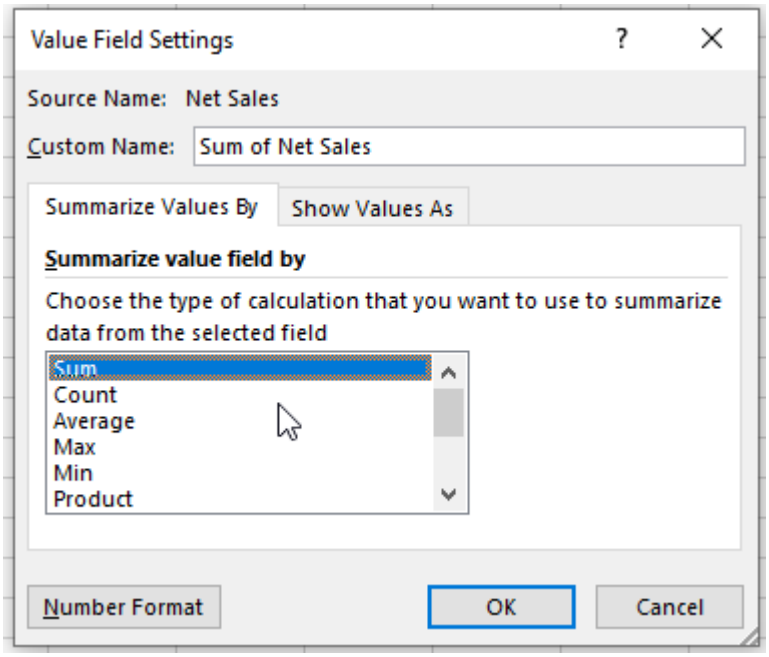
Click on the pivot table in the new sheet to get the fields list. Choose PivotTable Fields as shown below



Click on Value Field Settings in Net Sales



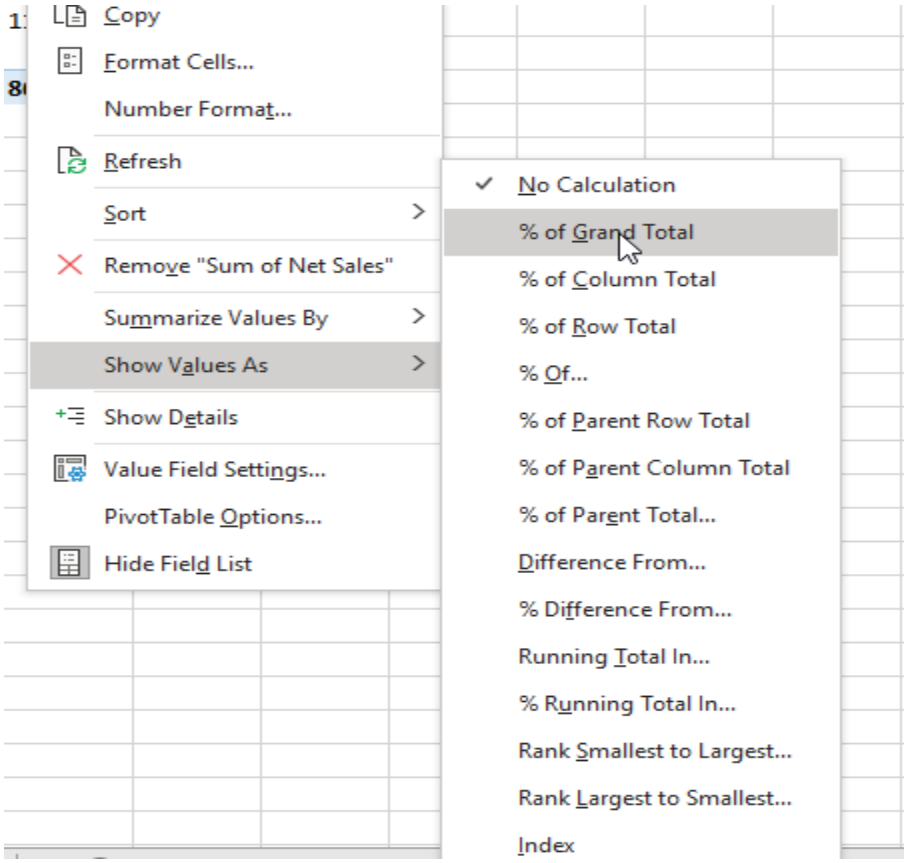
Choose Sum and click OK



The output of the new sheet looks like this. Change the formatting if required

Sum of Net Sales	Column Labels			
Row Labels	Middle	North	West	Grand Total
Adam	362422.75	439782.25	451979.5	1254184.5
Calvin	407584.5	439990	424312.75	1271887.25
Daniel	402618.75	418069.25	357321.25	1178009.25
Henry	469768	445709.25	427216.75	1342694
Justin	436253.5	376208.5	359283	1171745
Paul	381035.5	402402.75	406208.25	1189646.5
Sindy	414850	450827	425526	1291203
Grand Total	**2874533**	**2972989**	**2851847.5**	**8699369.5**

Right click on the pivot table and choose **Show Values As** and select **% of Grand Total**



The final output is as shown below:

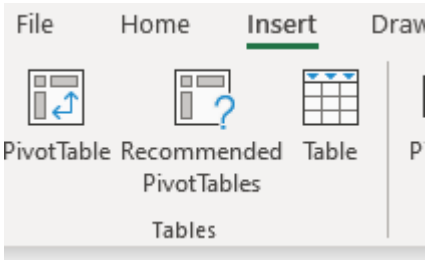
Sum of Net Sales	Column Labels			
Row Labels	Middle	North	West	Grand Total
Adam	4.17%	5.06%	5.20%	14.42%
Calvin	4.69%	5.06%	4.88%	14.62%
Daniel	4.63%	4.81%	4.11%	13.54%
Henry	5.40%	5.12%	4.91%	15.43%
Justin	5.01%	4.32%	4.13%	13.47%
Paul	4.38%	4.63%	4.67%	13.68%
Sindy	4.77%	5.18%	4.89%	14.84%
Grand Total	**33.04%**	**34.17%**	**32.78%**	**100.00%**

How to Add Calculated Field

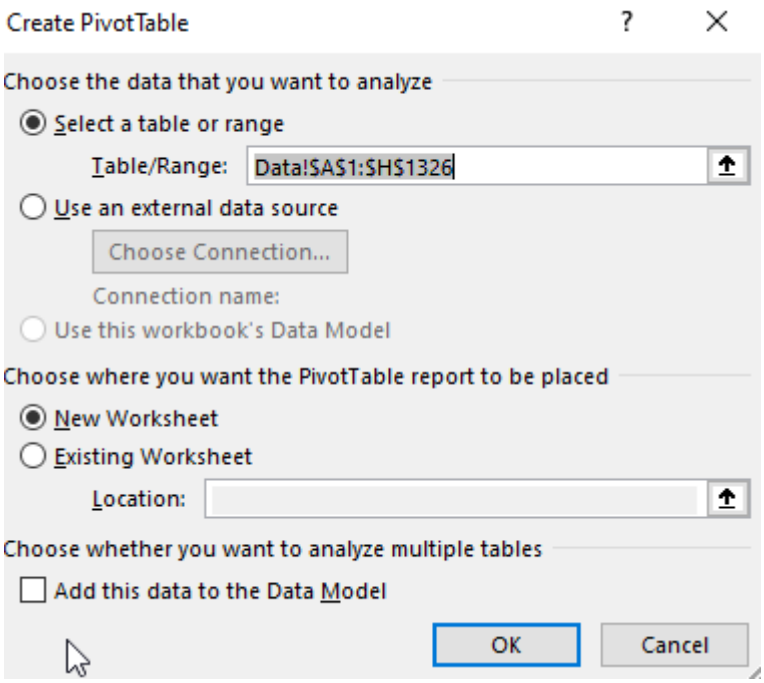
Objective: Demonstrate how to add Calculated Field in an existing PivotTable

Open the Excel file- Open the file named **Pivot Table.xlsx** and worksheet **Data**

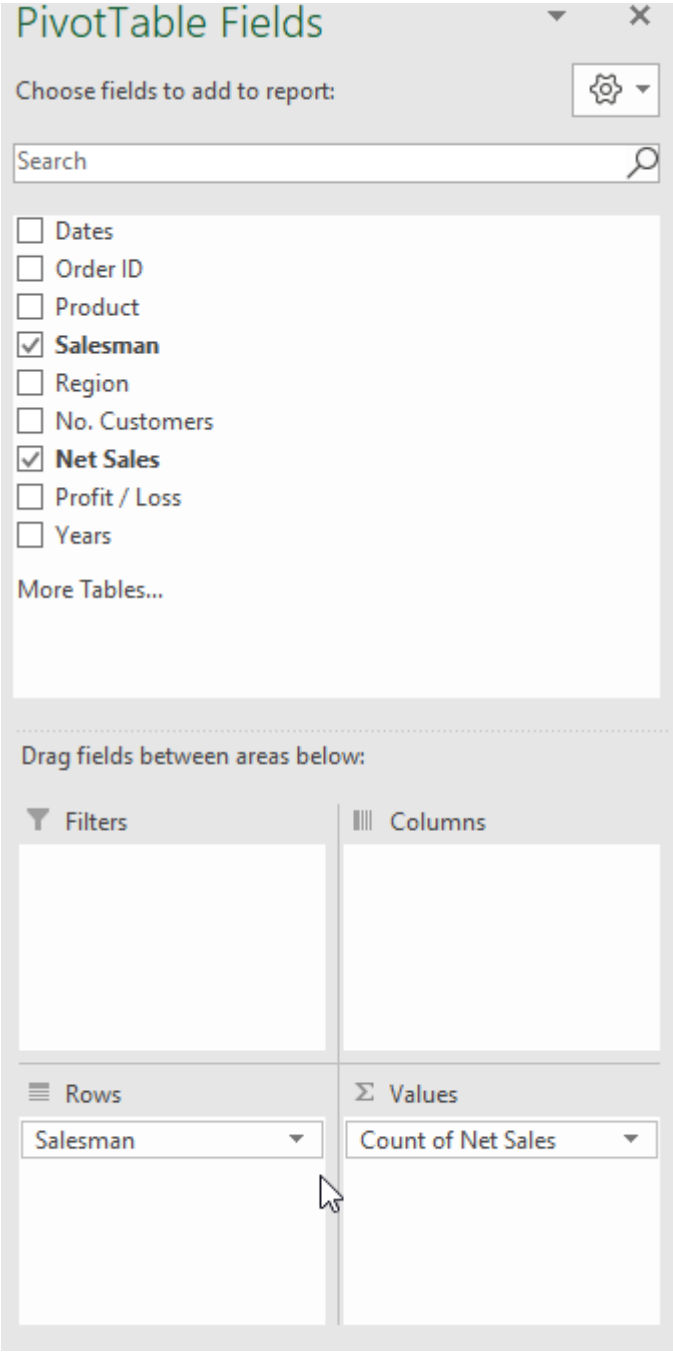
Creating a pivot table - Create a pivot table by clicking on the **Insert** tab, selecting the drop-down under **PivotTable**, and choosing **From Table/Range**



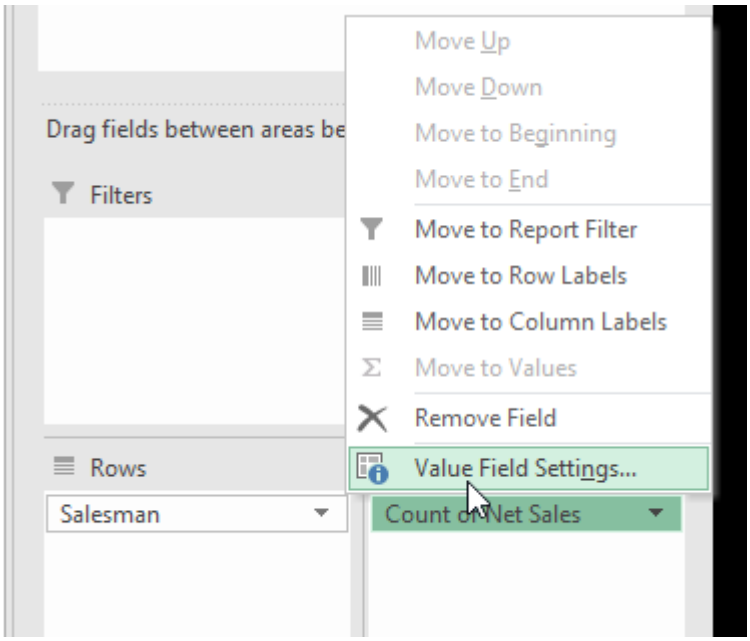
In the Create PivotTable dialog, select the input range and choose a **New Worksheet** for the pivot table



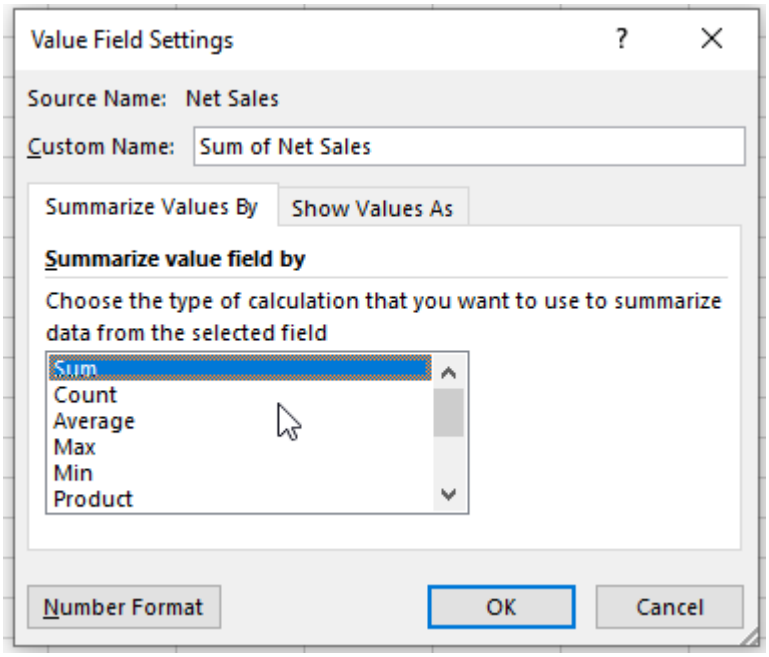
Click on the pivot table in the new sheet to get the Fields list. Choose pivot fields as below



Click on Value Field Settings in Net Sales



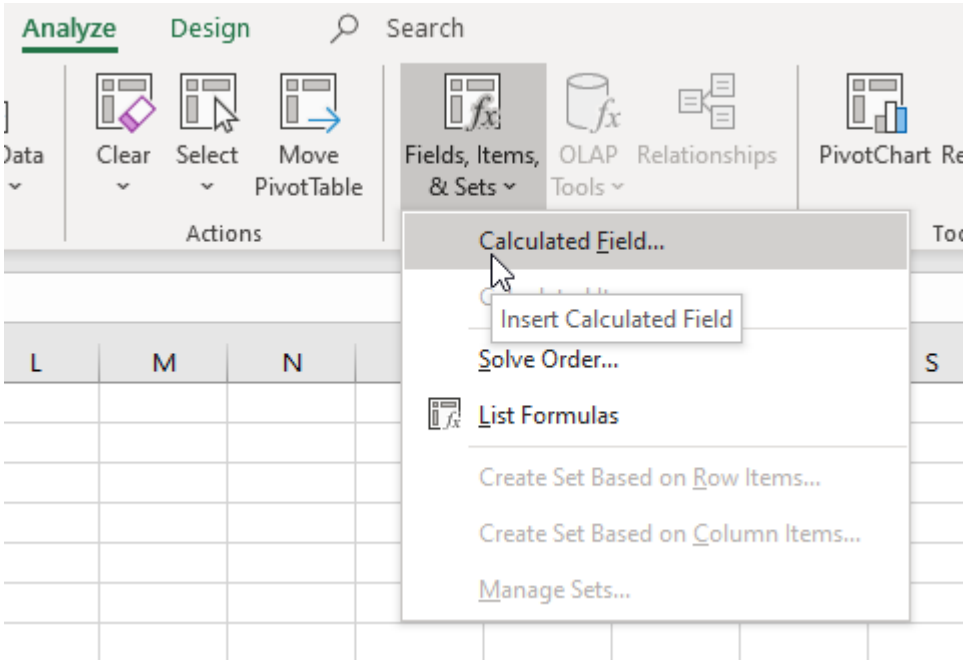
Choose Sum and click OK



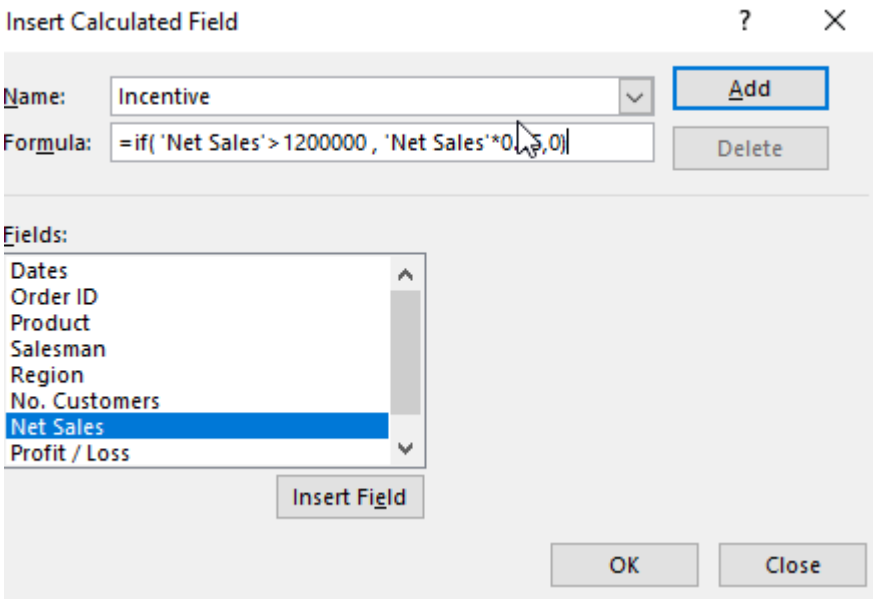
The output of the new sheet looks like this. Change the formatting if required

Row Labels	Sum of Net Sales
Adam	1254184.5
Calvin	1271887.25
Daniel	1178009.25
Henry	1342694
Justin	1171745
Paul	1189646.5
Sindy	1291203
Grand Total	**8699369.5**

Click on **Calculated Field** under **Fields, Items, & Sets** in the **Analyze** tab



Enter the Insert Calculated Field as below:



Click on Add and select OK

The output pivot table is shown below:

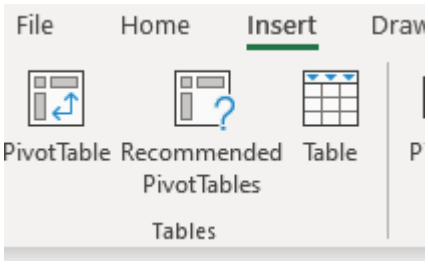
Row Labels	Sum of Net Sales	Sum of Incentive
Adam	1254[illegible]4.5	62,709.2
Calvin	1271887.25	63,594.4
Daniel	1178009.25	-
Henry	1342694	67,134.7
Justin	1171745	-
Paul	1189646.5	-
Sindy	1291203	64,560.2
Grand Total	**8699369.5**	**434,968.5**

How to Add Calculated Item

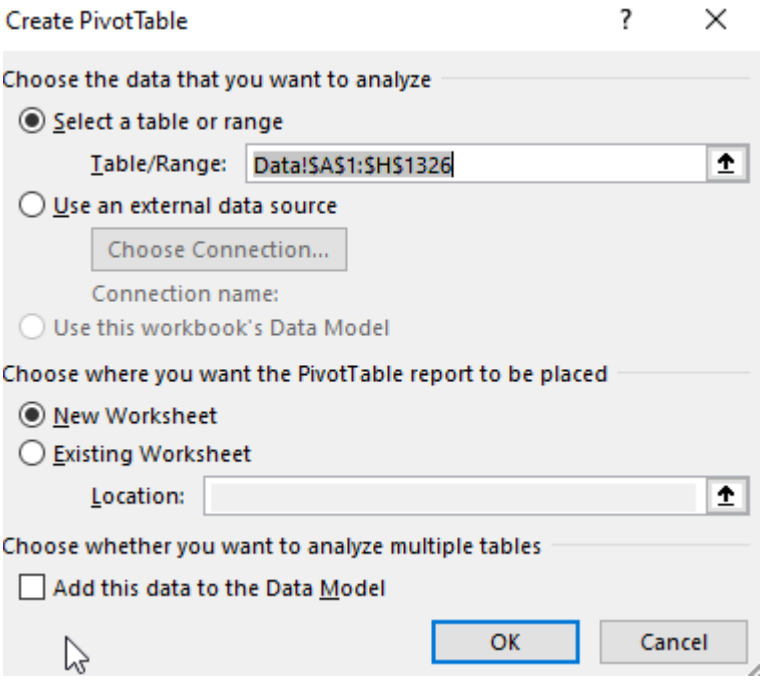
Objective: Demonstrate how to add a Calculated Item in an existing PivotTable

Open the Excel file - Open the file named **Pivot Table.xlsx** and worksheet **Data**

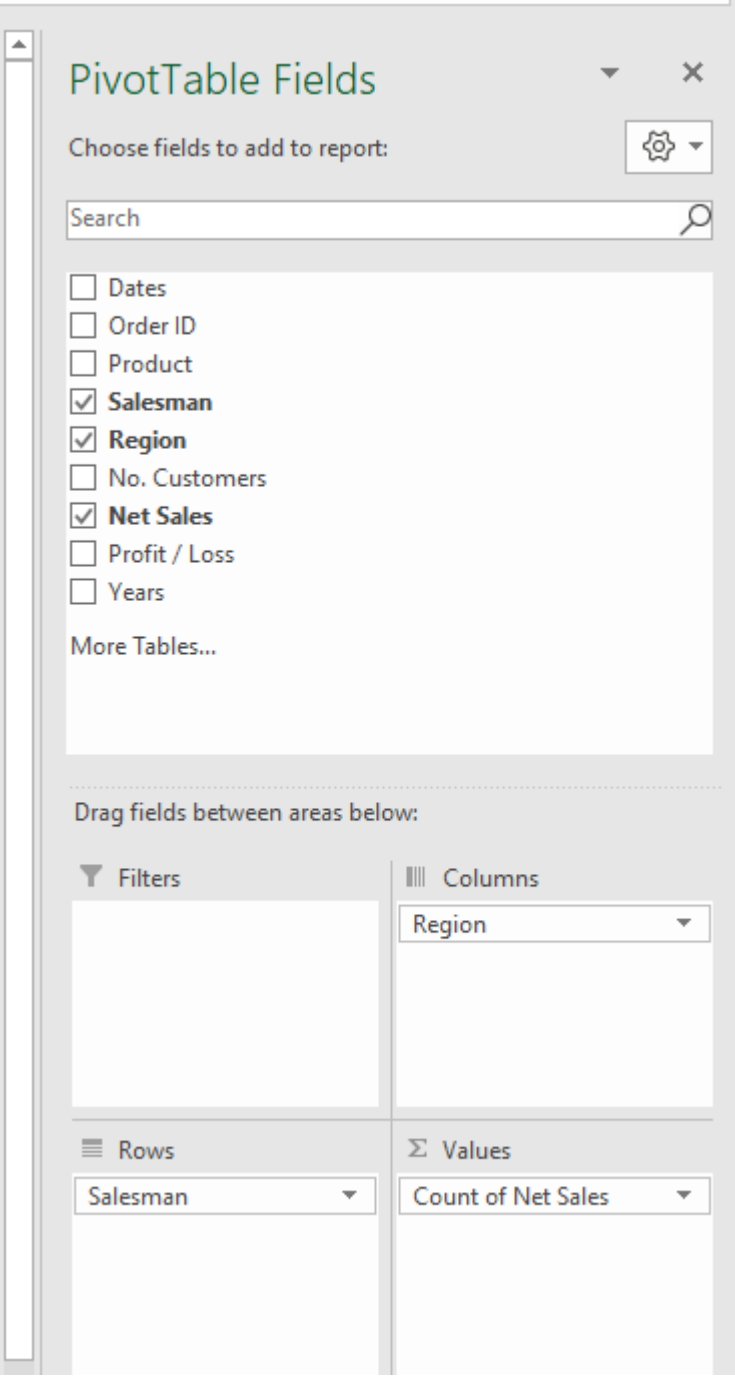
Creating a pivot table - Click on PivotTable in the Insert tab



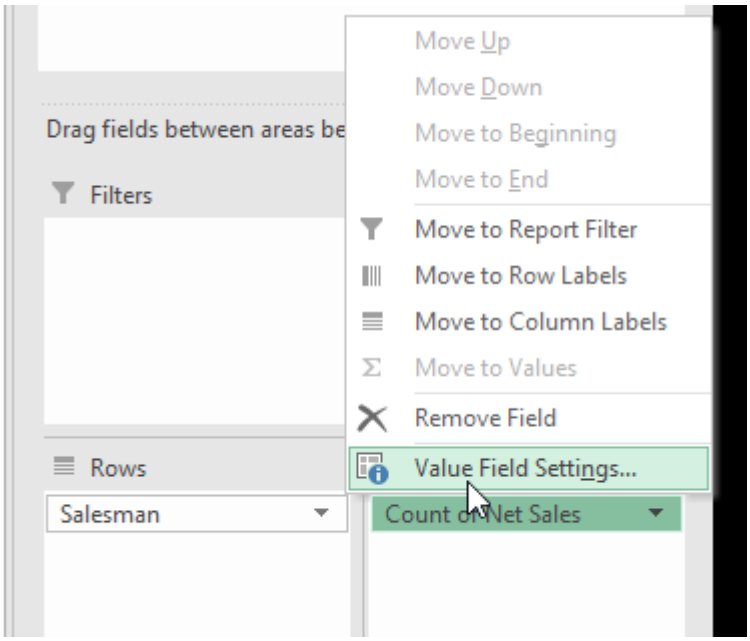
In the Create PivotTable dialog, select the input range and choose a **New Worksheet** for the pivot table



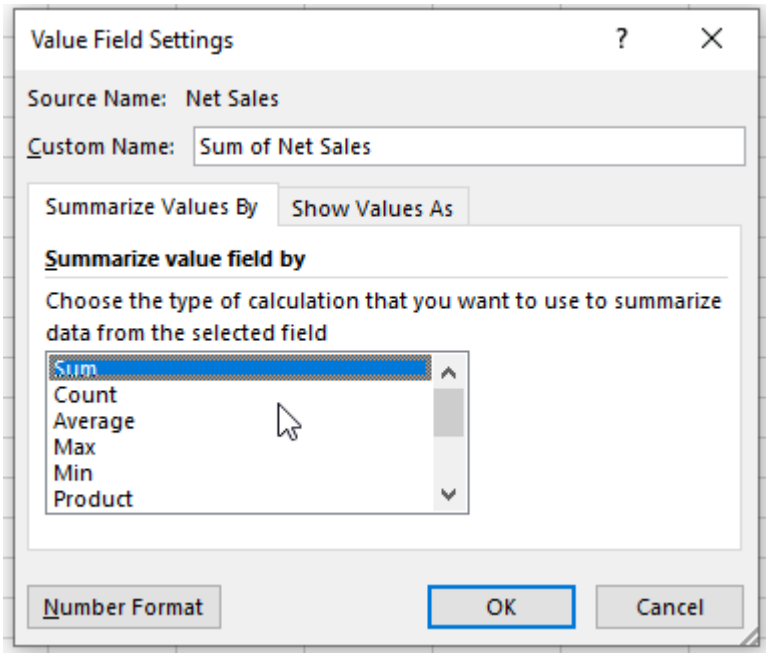
Click on the Pivot table in a new sheet to get the Fields list. Choose Pivot fields as below



Click on Value Field Settings in Net Sales



Choose Sum and click OK

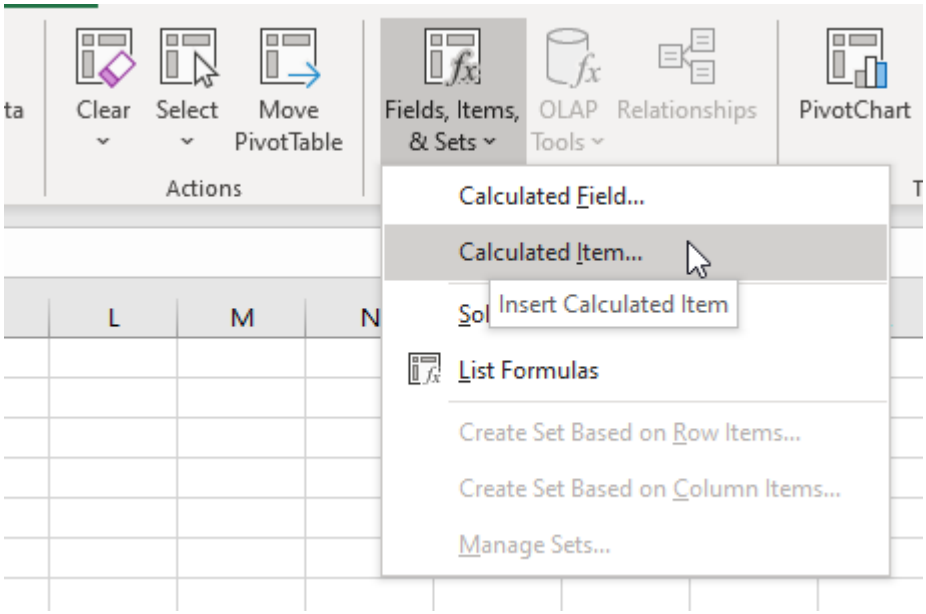


The new output sheet looks like this. Change the formatting if required

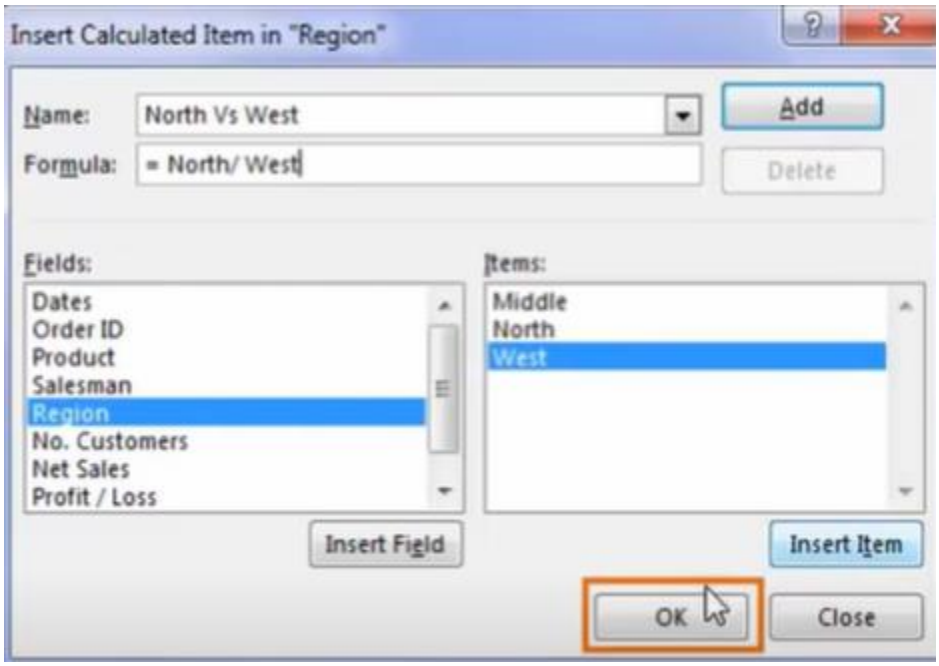
Sum of Net Sales	Column Labels			
Row Labels	Middle	North	West	Grand Total
Adam	362422.75	439782.25	451979.5	1254184.5
Calvin	407584.5	439990	424312.75	1271887.25
Daniel	402618.75	418069.25	357321.25	1178009.25
Henry	469768	445709.25	427216.75	1342694
Justin	436253.5	376208.5	359283	1171745
Paul	381035.5	402402.75	406208.25	1189646.5
Sindy	414850	450827	425526	1291203
Grand Total	**2874533**	**2972989**	**2851847.5**	**8699369.5**

Click on the pivot table **West** cell

Click on Calculated Item link in Fields, Items, & Sets under the Analyze tab



Create a new calculated Item for Region as shown below:



Change the newly created column to percent values

Sum of Net Sales	Column Labels				
Row Labels	Middle	North	West	North Vs West	Grand Total
Adam	362,423	439,782	451,980	97%	1,254,185
Calvin	407,585	439,990	424,313	104%	1,271,888
Daniel	402,619	418,069	357,321	117%	1,178,010
Henry	469,768	445,709	427,217	104%	1,342,695
Justin	436,254	376,209	359,283	105%	1,171,746
Paul	381,036	402,403	406,208	99%	1,189,647
Sindy	414,850	450,827	425,526	106%	1,291,204
Grand Total	**2,874,533**	**2,972,989**	**2,851,848**	**732%**	**8,699,377**

How to Create Charts

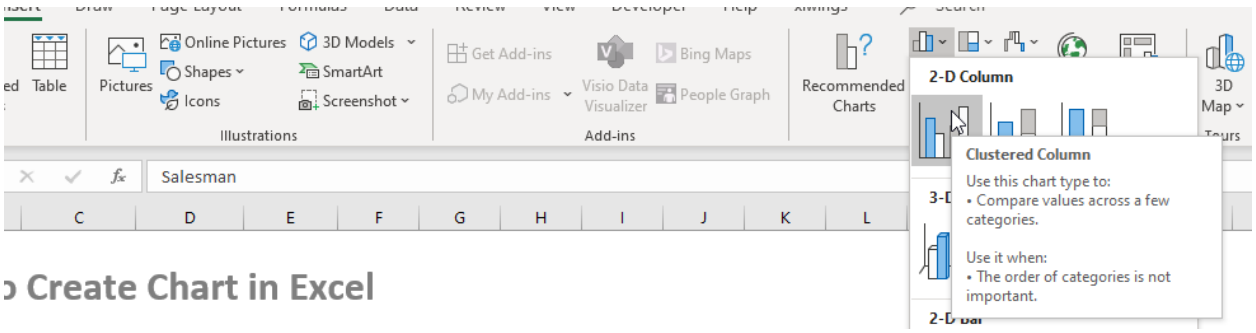
Objective: Demonstrate how to create charts in Excel

Open the Excel file - Open the file named **Chart.xlsx** and click on the **Chart** worksheet

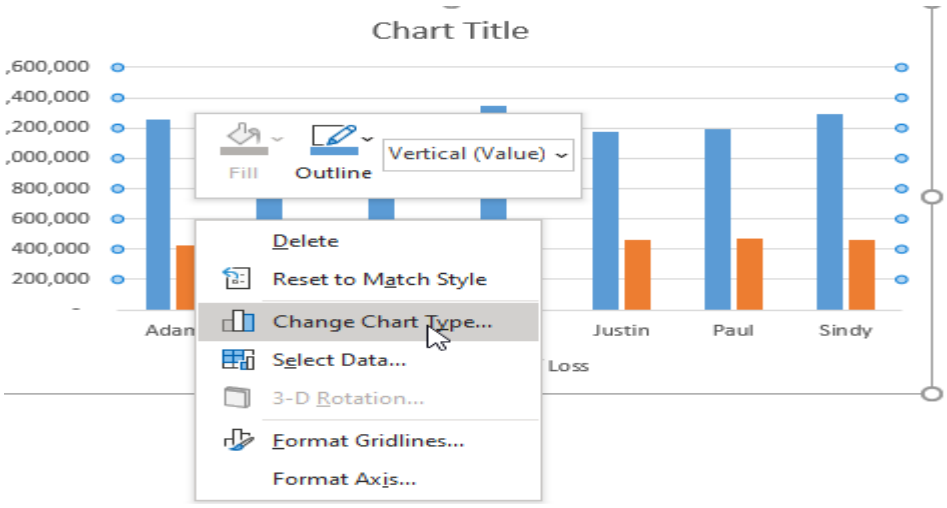
Create a chart - Choose the data in the sheet

Salesman	Net Sales	Profit / Loss
Adam	1,254,185	426,295
Calvin	1,271,887	485,029
Daniel	1,178,009	437,307
Henry	1,342,694	459,901
Justin	1,171,745	458,208
Paul	1,189,647	471,604
Sindy	1,291,203	464,468

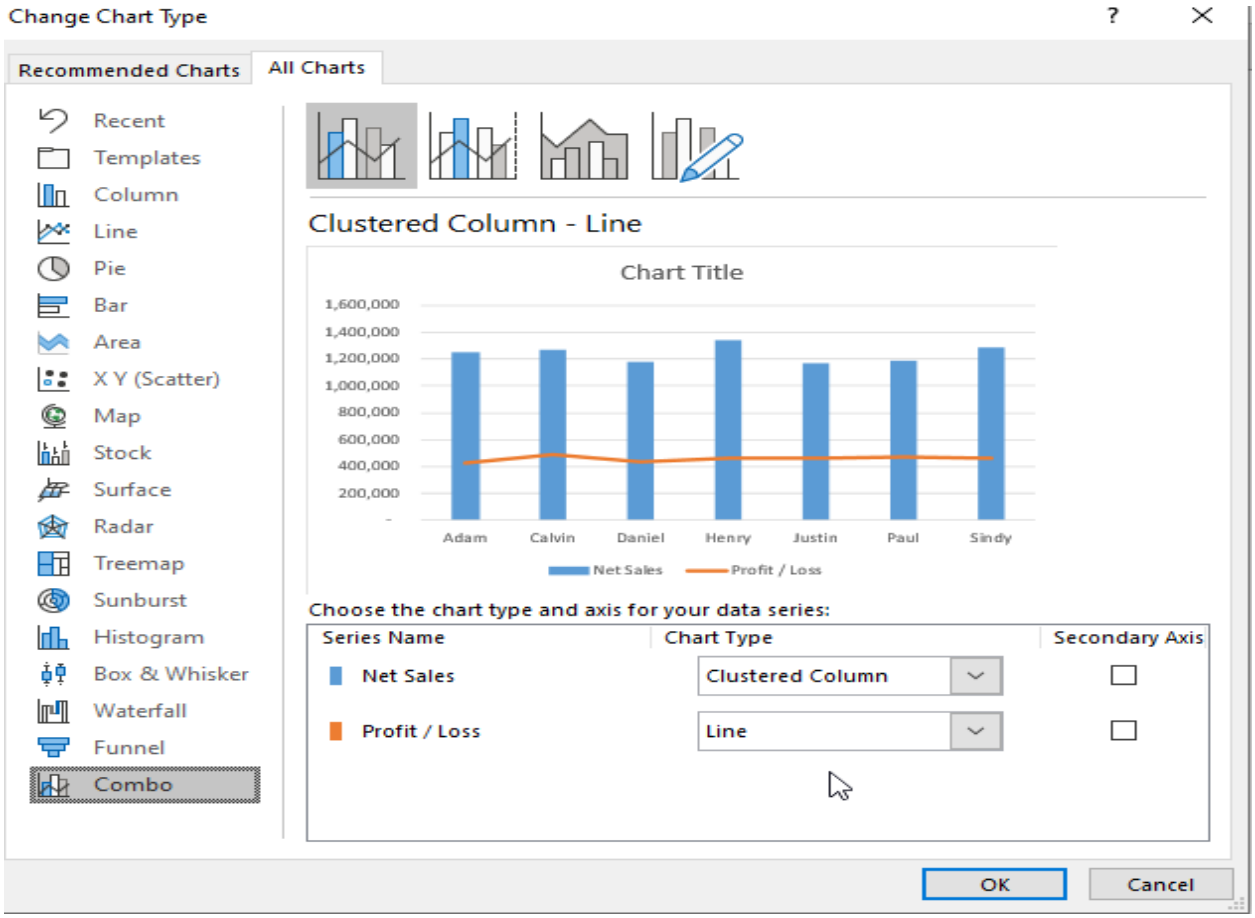
Click on the **2-D Column** chart under the **Insert** tab



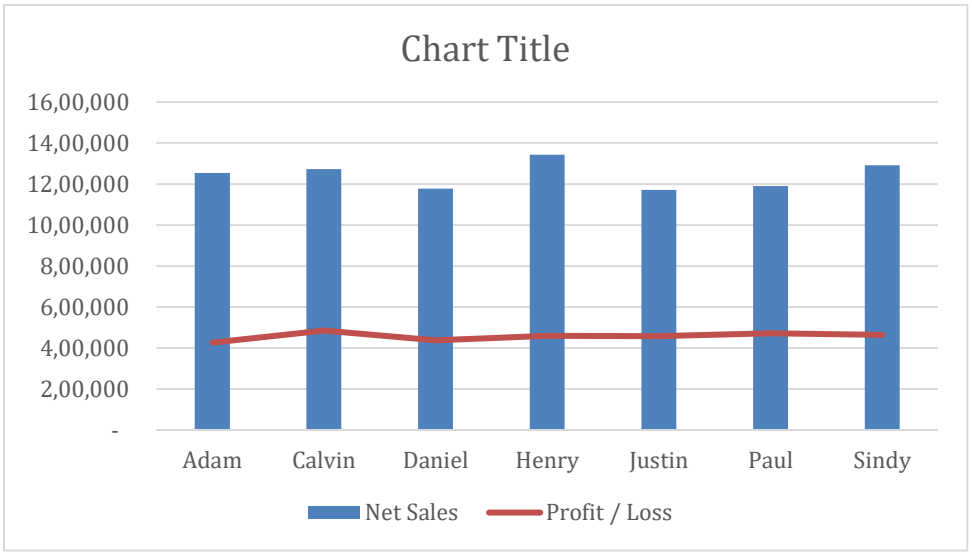
The chart is created. Click on **Change Chart Type**



In the **Change Chart Type** dialog, click on the **Combo** tab. The clustered column is selected. Click OK



The final chart looks like as shown below:



How to Apply Chart Formatting

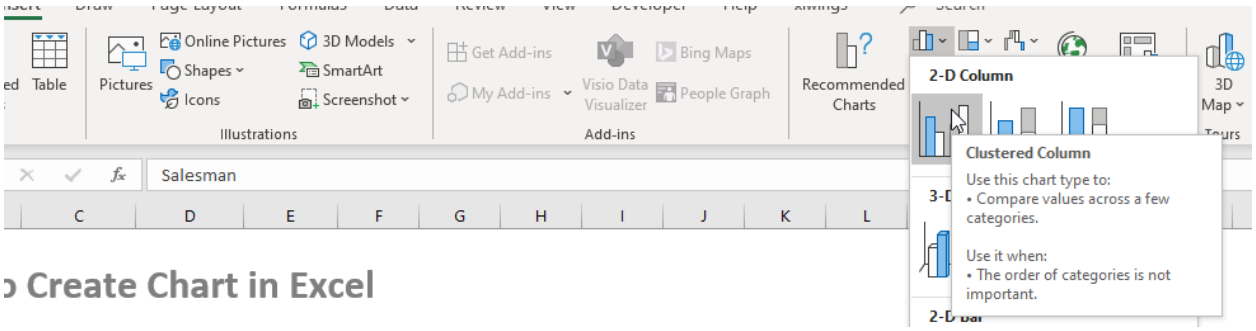
Objective: Demonstrate how to apply Chart Formatting in Excel

Open the Excel file 0 Open the file named **Chart.xlsx** and click on the **Chart Formatting** worksheet

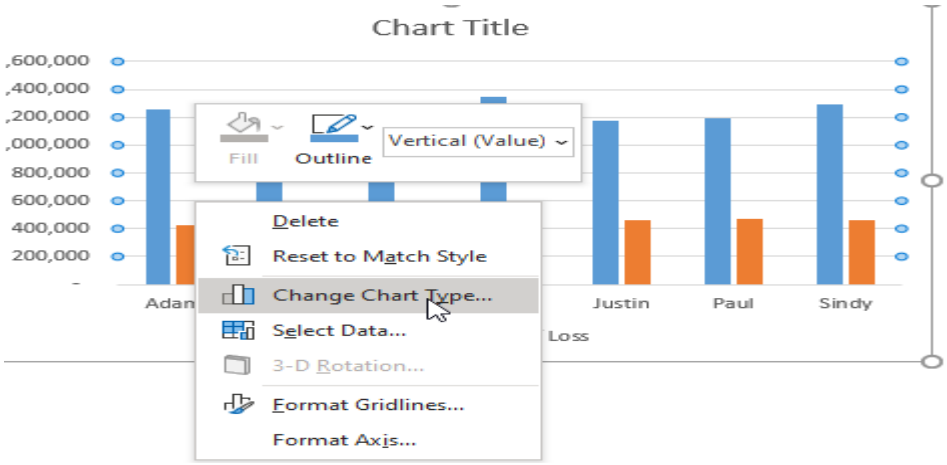
Create a chart - Choose the data in the sheet

Salesman	Net Sales	Profit / Loss
Adam	1,254,185	426,295
Calvin	1,271,887	485,029
Daniel	1,178,009	437,307
Henry	1,342,694	459,901
Justin	1,171,745	458,208
Paul	1,189,647	471,604
Sindy	1,291,203	464,468

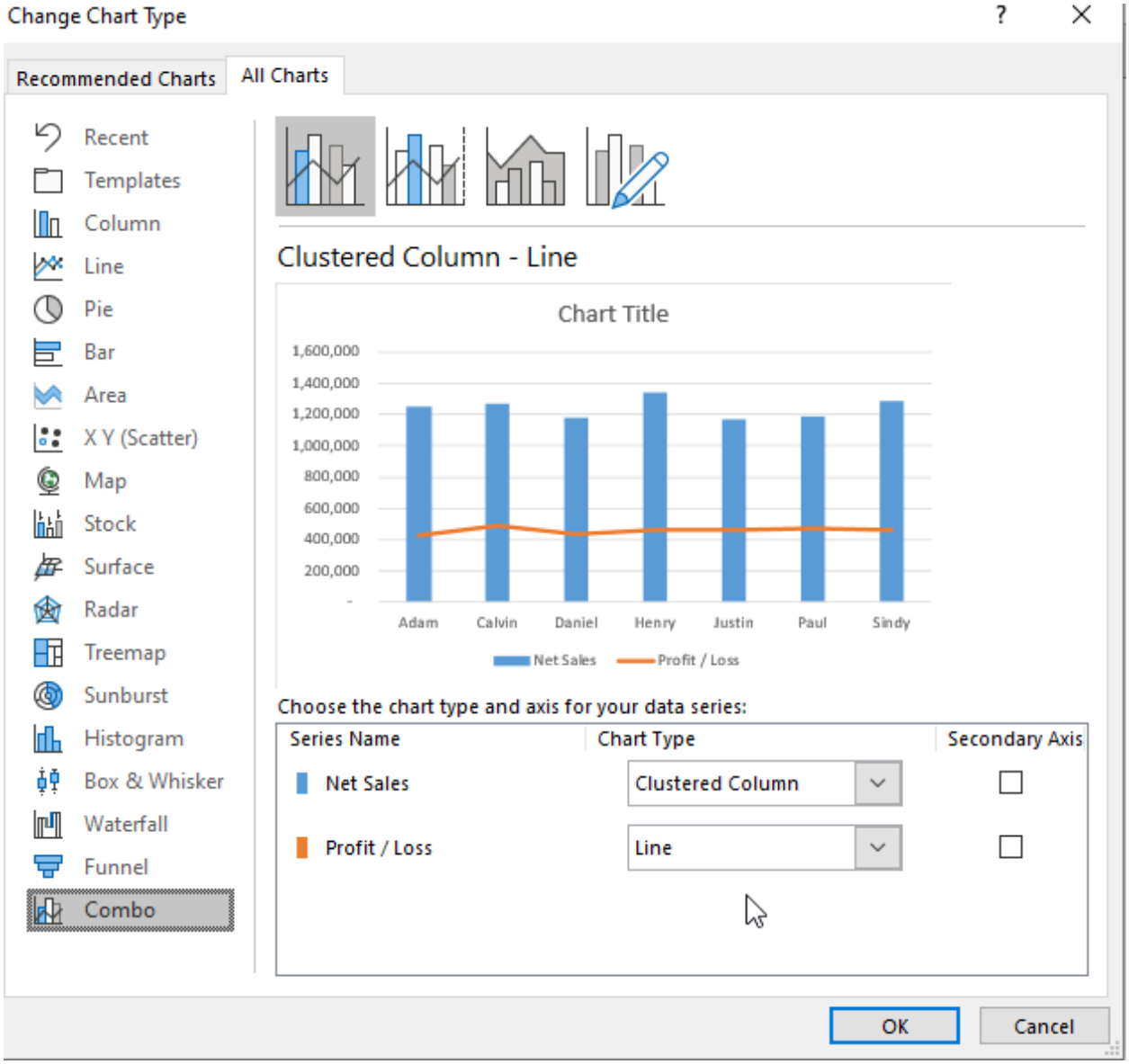
Click on the **2-D Column** Chart under the **Insert** tab



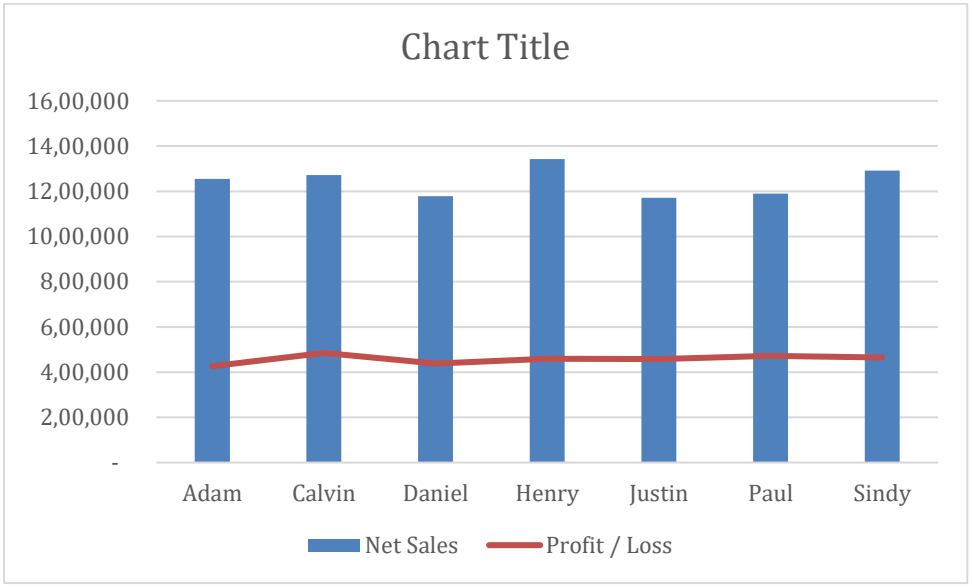
The chart is created. Click on **Change Chart Type**



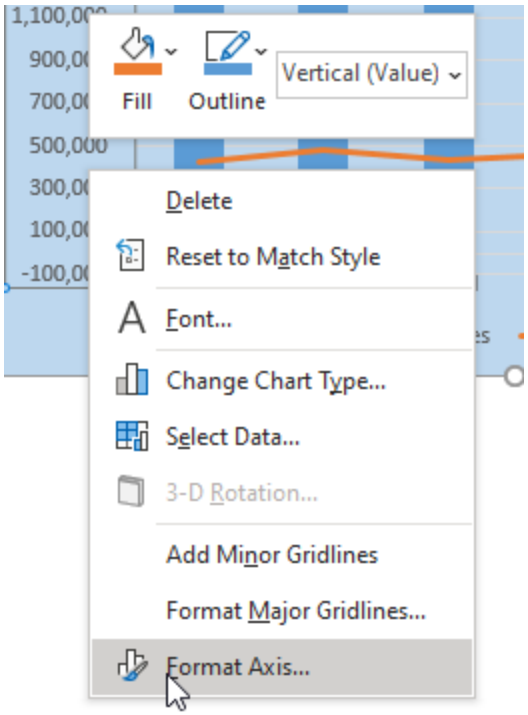
In the **Change Chart Type** dialog, click on the **Combo** tab. The clustered column is selected. Click OK



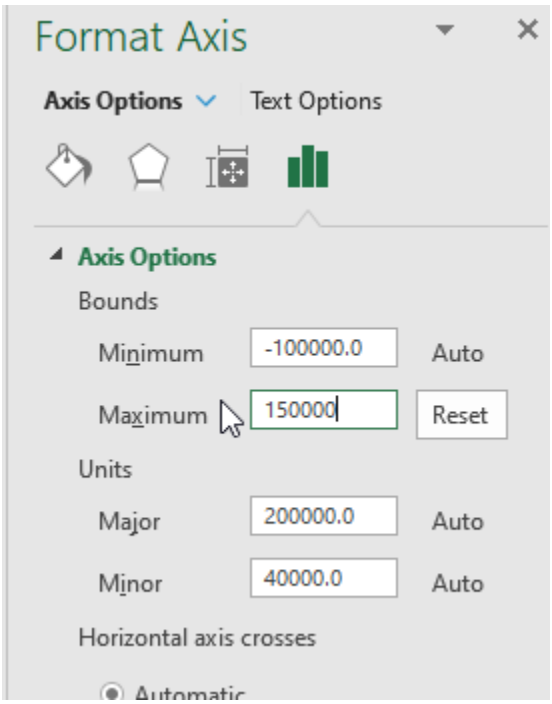
The created chart looks as shown below:



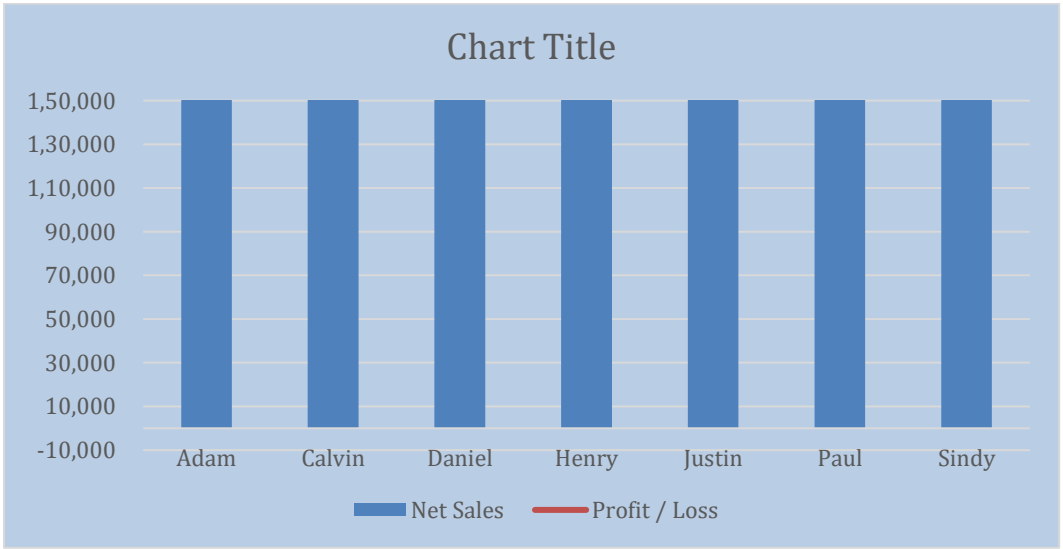
Right-click on the vertical axis and click on **Format Axis**



Change the Maximum bound to 150000



The final chart looks as shown below:



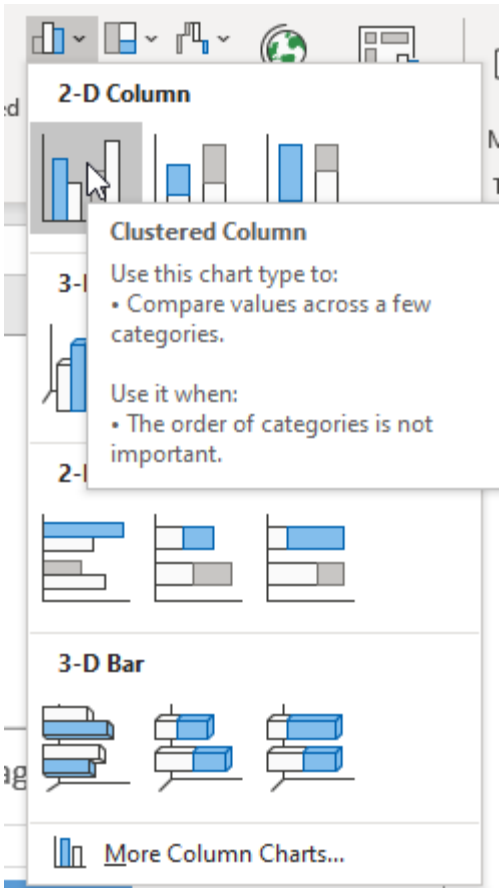
How to Create a Thermometer Chart

Objective: Demonstrate how to create a Thermometer chart in Excel

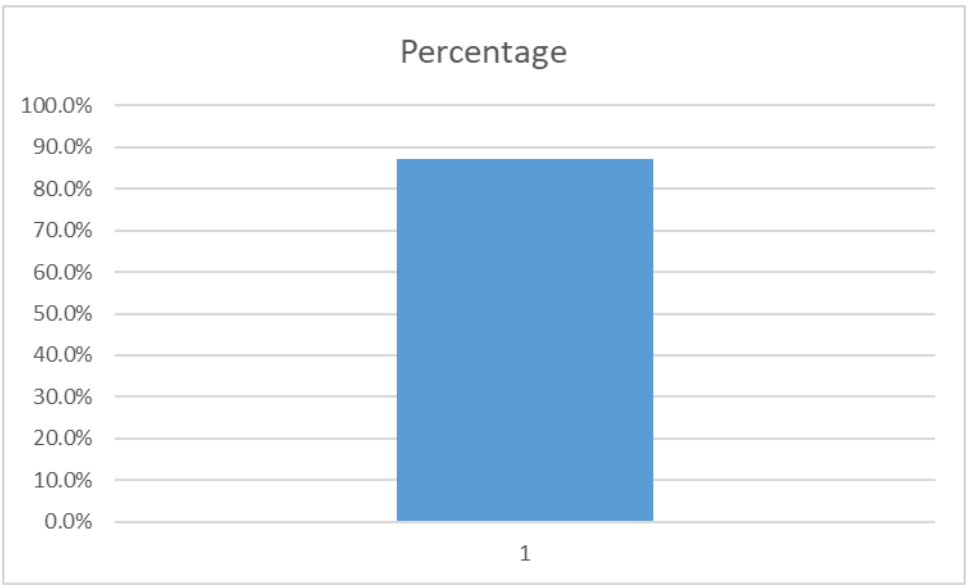
Open the Excel file - Open the file named **Chart.xlsx** and click on the **Thermometer Chart** worksheet

Creating a chart - Choose cell C22 in the sheet

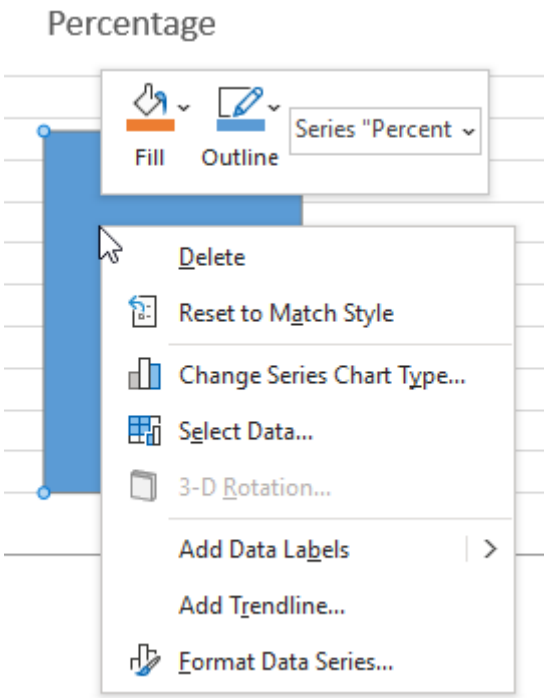
In the Insert tab, choose **Clustered Column** chart for the data



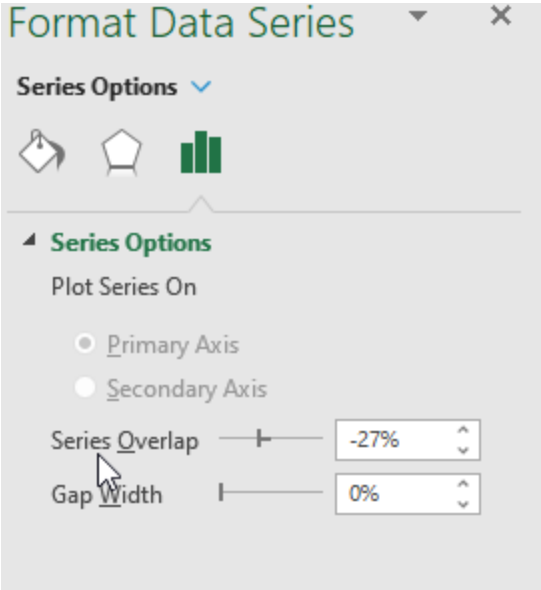
The chart looks like the following:



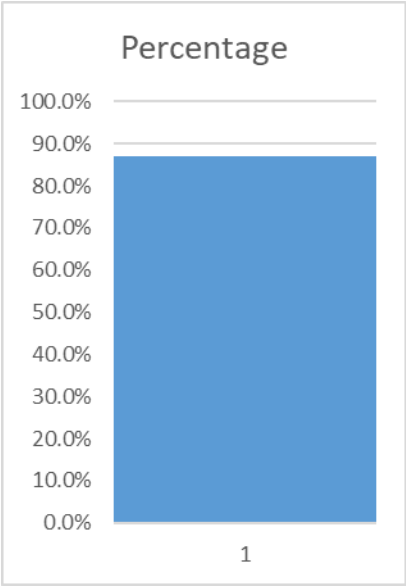
Right click on the chart and select **Format Data Series**



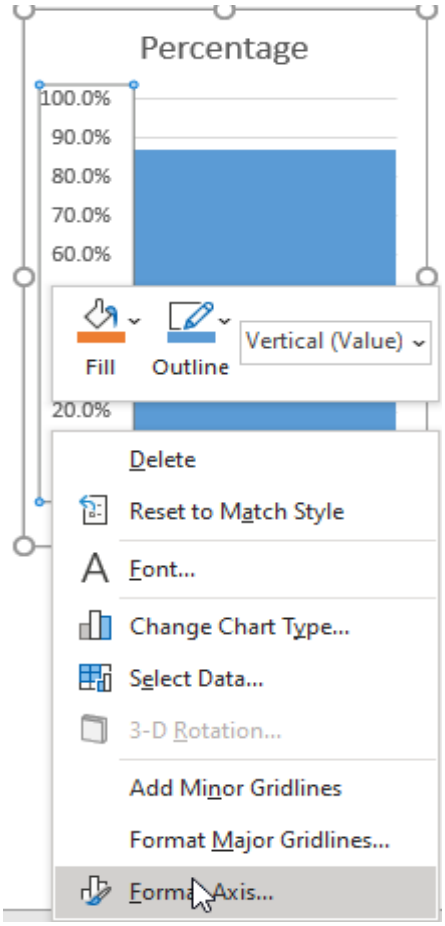
Change the **Gap Width** to **0%**



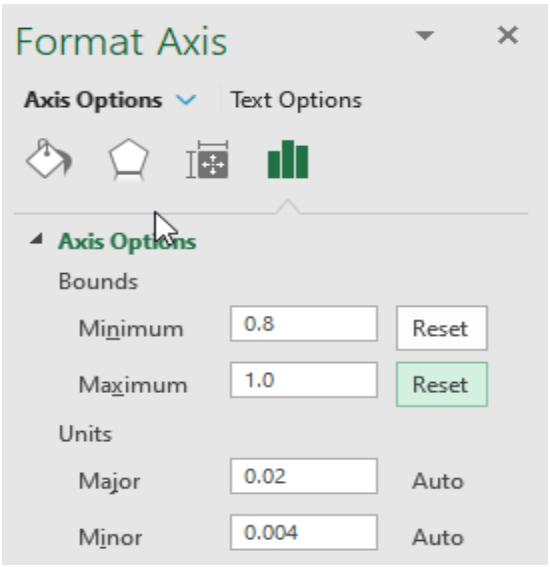
Resize the chart to be narrower



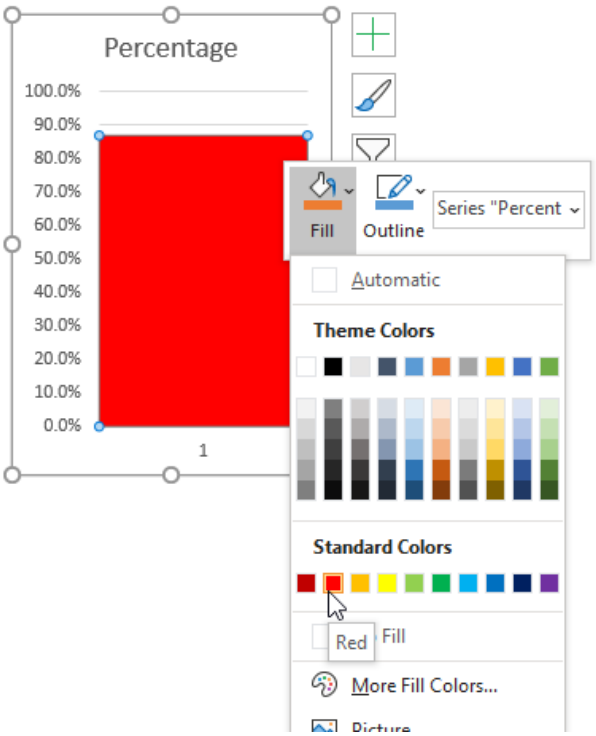
Right-click on the vertical axis and choose **Format Axis**



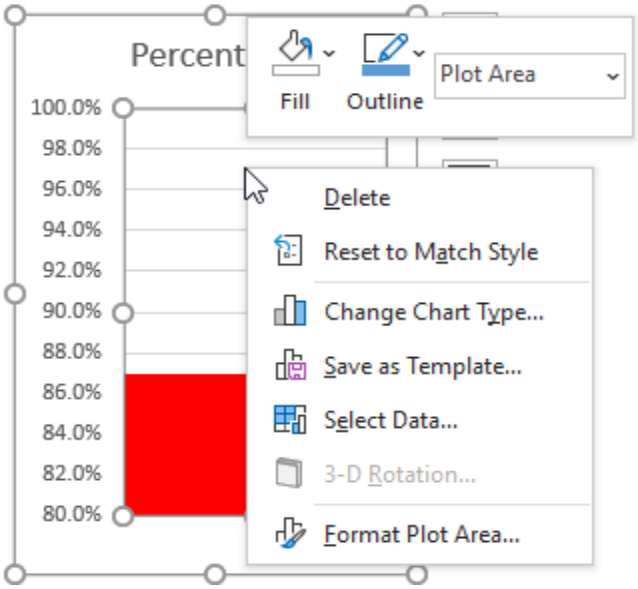
Change Minimum to **0.8** and Maximum to **1** in the Bounds



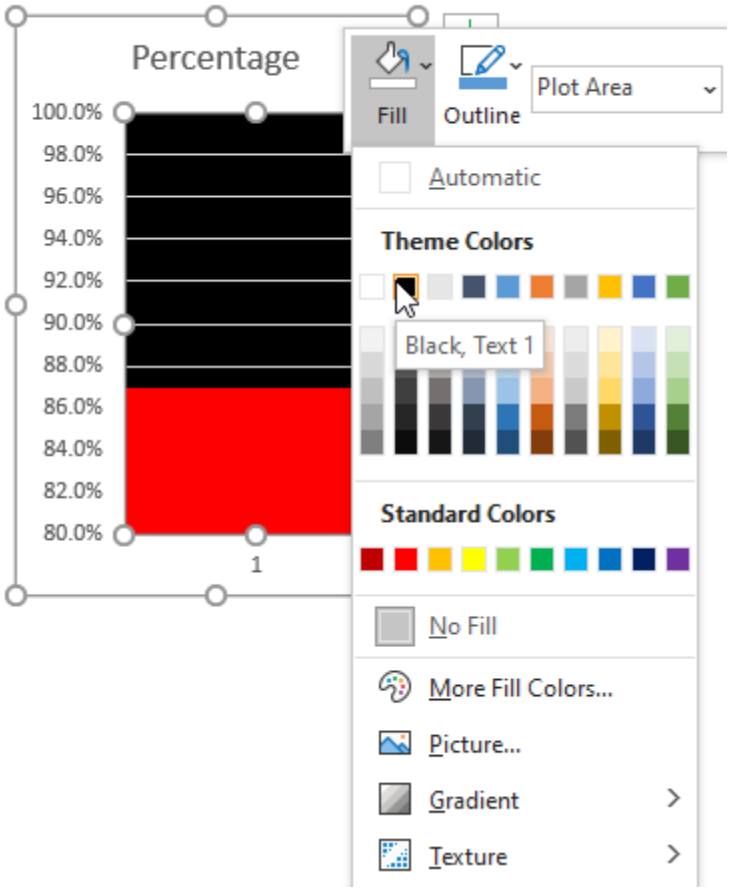
Right-click on the bar and change color to **Red**



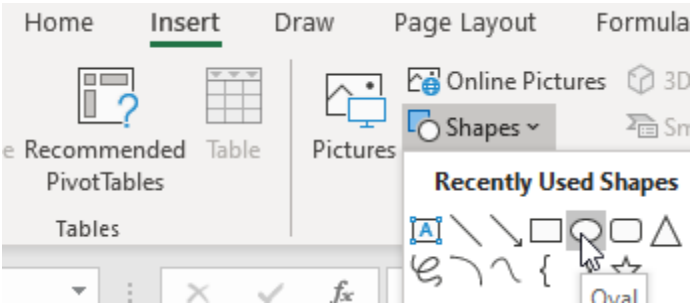
Right-click on the top part of the bar and click **Fill**



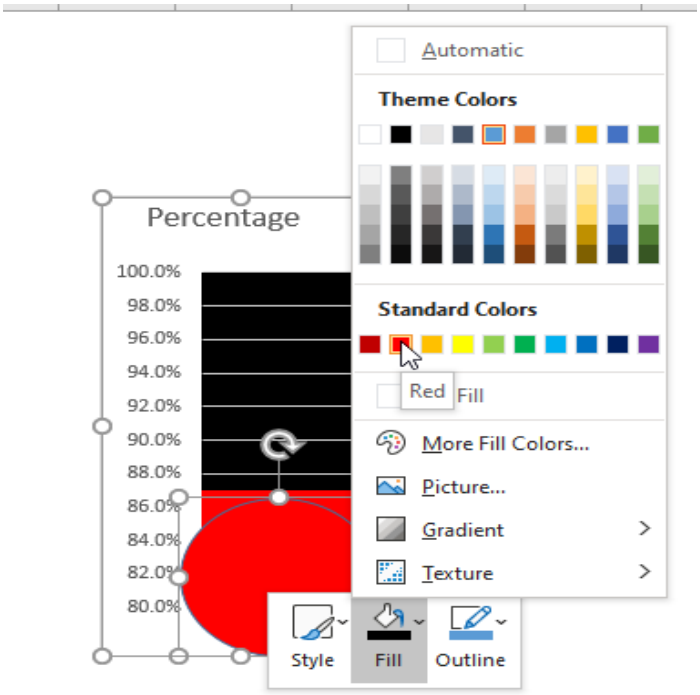
Change the fill color to **black**



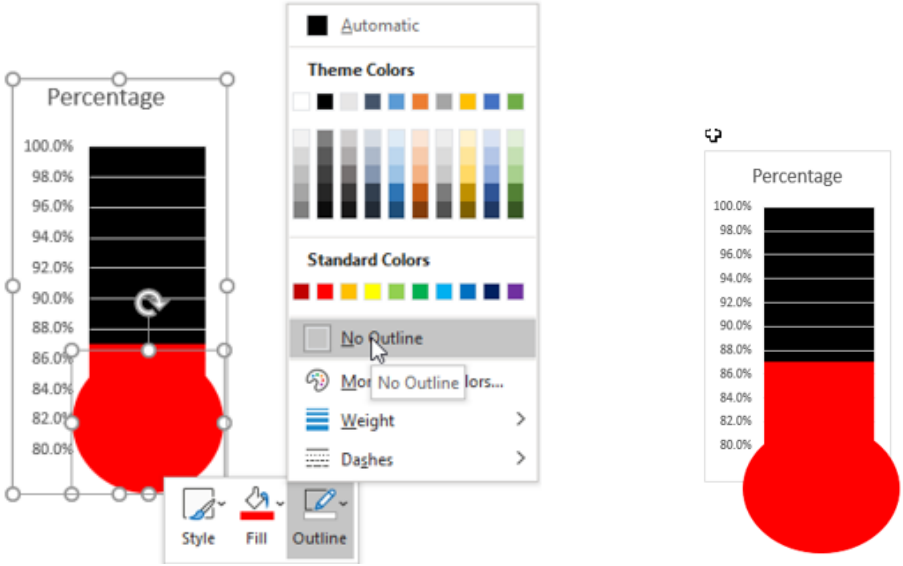
Insert an **oval shape** by going to **Shapes** under the Insert tab



Change the fill color of the oval to **Red**



Change the **Outline** color of the oval to **Red**



The final thermometer chart looks like the following:

How to Create Pareto Chart

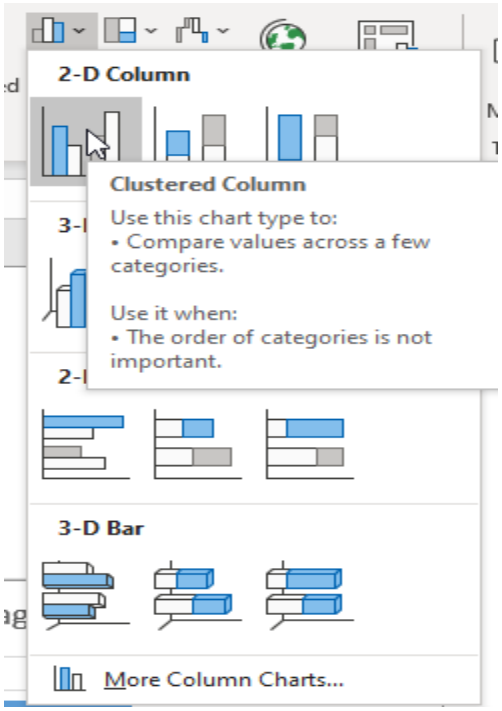
Objective: Demonstrate how to create Pareto Chart in Excel

Open the Excel file - Open the file named **Chart.xlsx** and click on the **Pareto Chart** worksheet

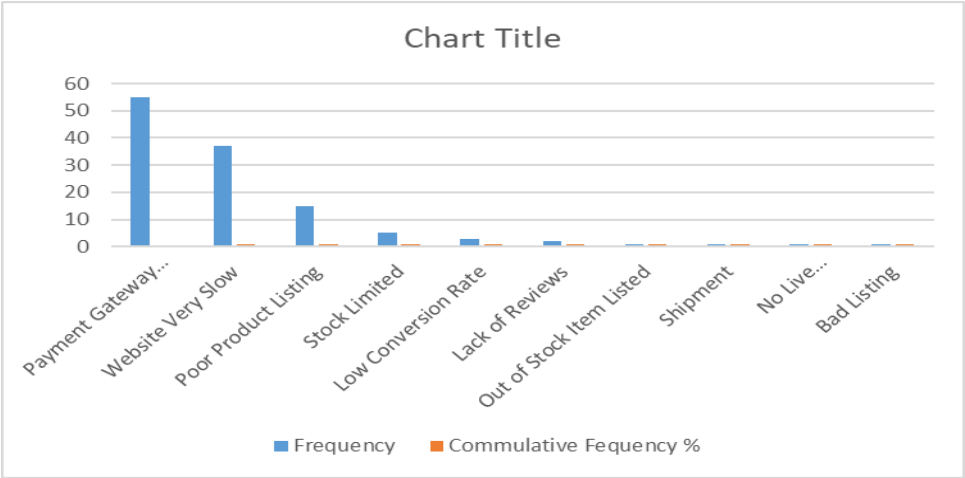
Create a chart - Customer Complaints and Frequency data on the table

Customer Complaints	Frequency	Cumulative Frequency	Commulative Fequency %
Payment Gateway Failure	55	55	45%
Website Very Slow	37	92	76%
Poor Product Listing	15	107	88%
Stock Limited	5	112	93%
Low Conversion Rate	3	115	95%
Lack of Reviews	2	117	97%
Out of Stock Item Listed	1	118	98%
Shipment	1	119	98%
No Live Communication Op	1	120	99%
Bad Listing	1	121	100%

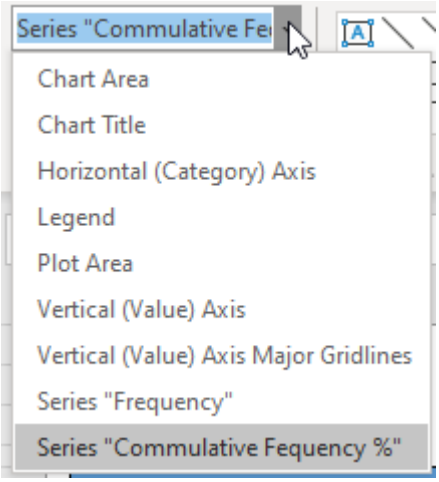
In the Insert tab, choose Clustered Column chart for the data



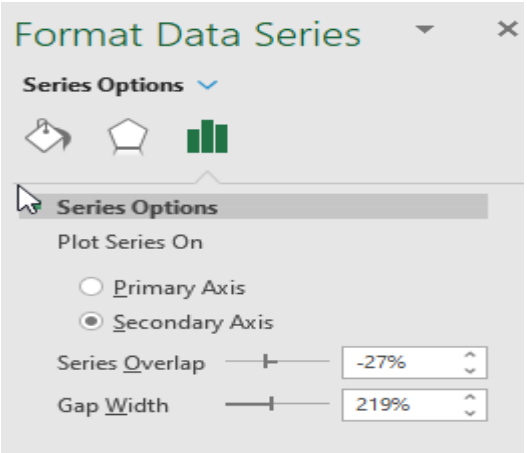
The chart will look like this



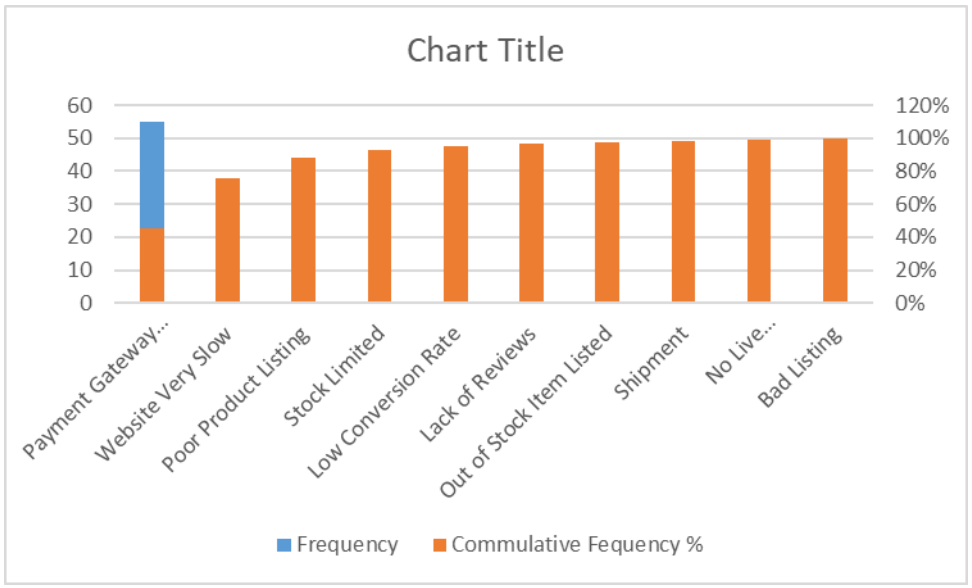
Click on the chart and choose **Series "Cumulative Frequency %"** in the drop-down



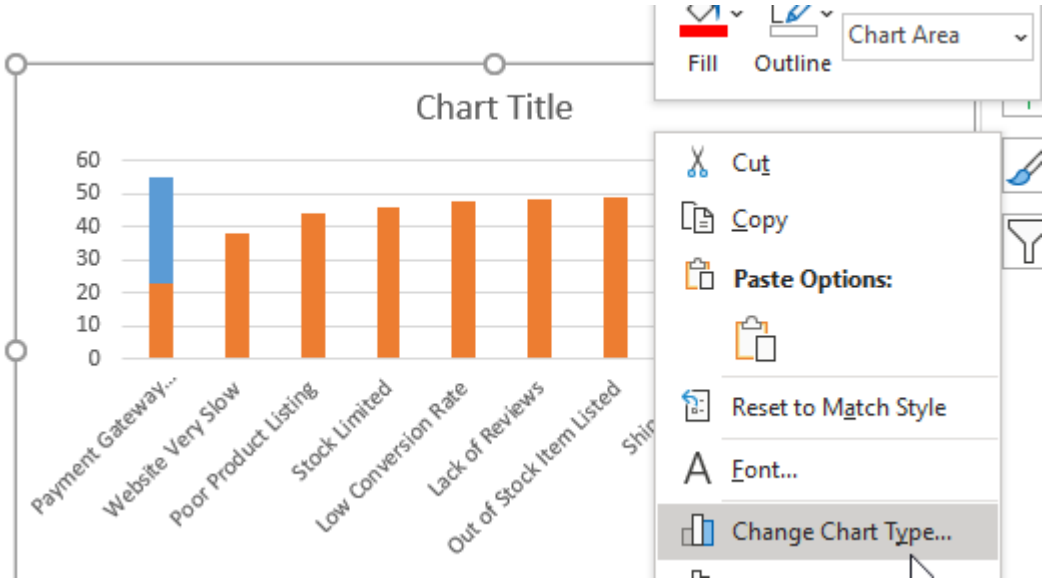
In the Format Data Series box, change the axis to Secondary Axis



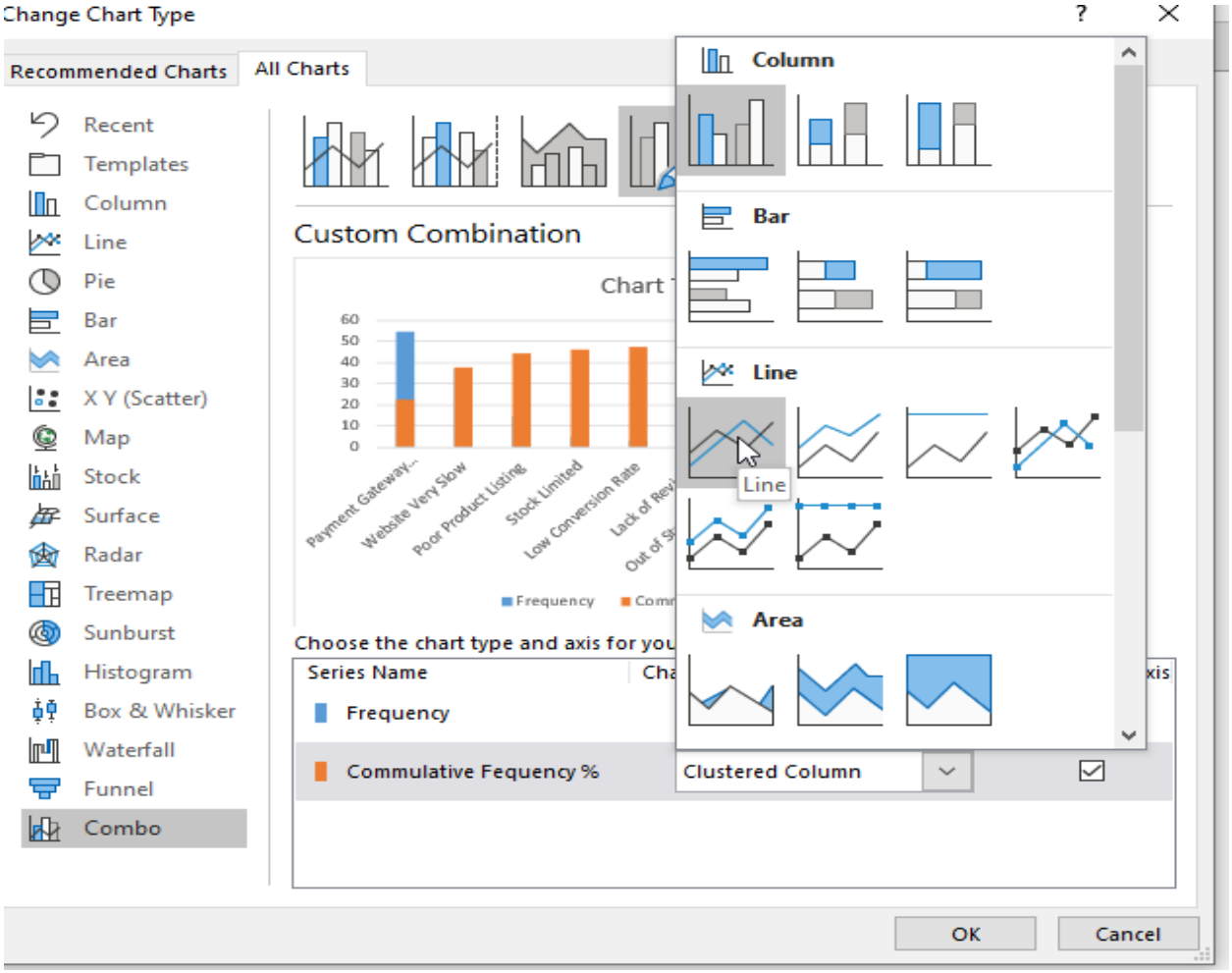
Now, the chart will look like this



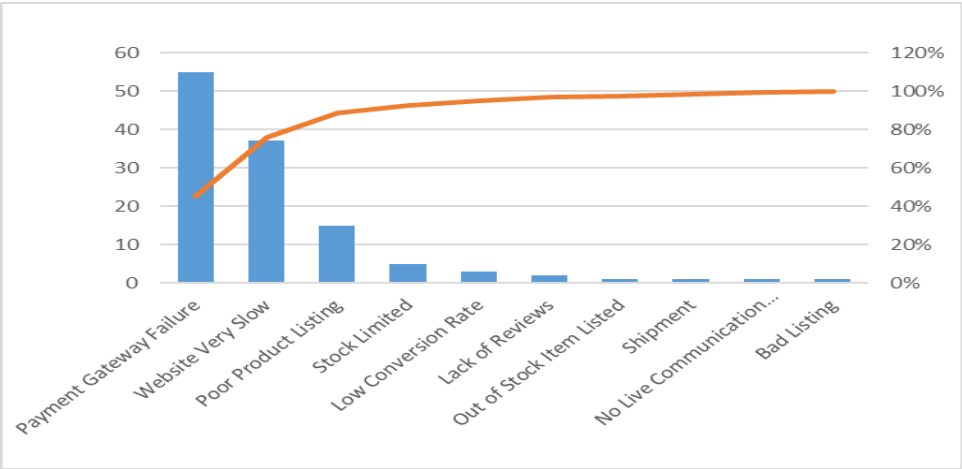
Right-click on the chart and choose Change Chart Type



In the Combo chart, change the Cumulative Frequency % to Line graph



The final Pareto chart will look like this

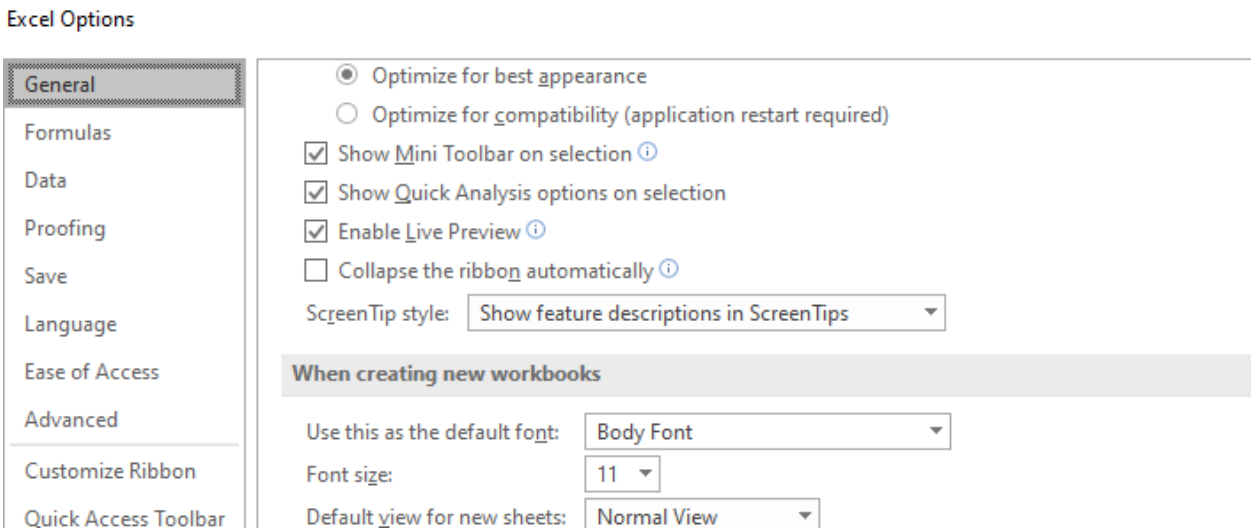


How to Install the Developer Tab

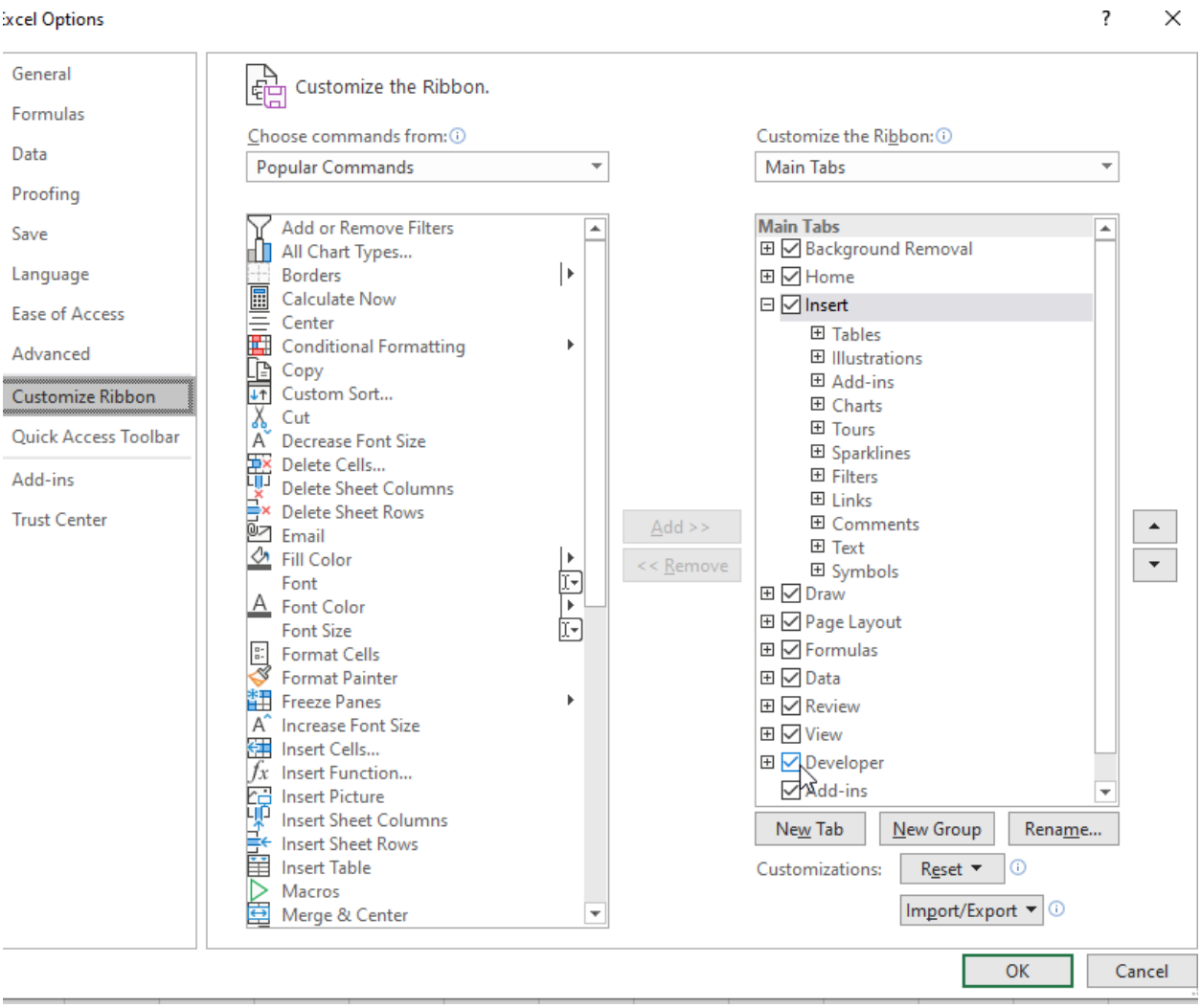
Objective: Demonstrate how to install the Developer tab to use various Form Controls in Excel

Open the Excel file - Open the file named **Chart.xlsx** and click on the **Developer** worksheet

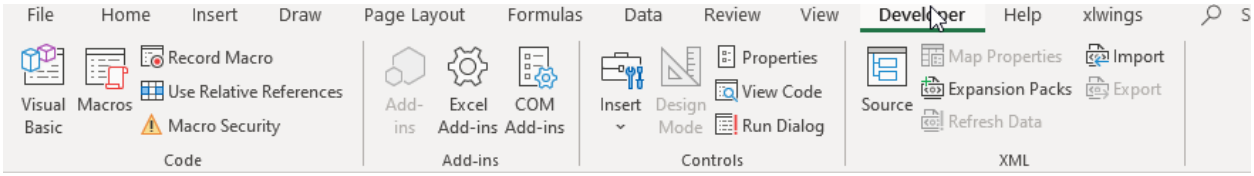
Install the Developer Tab - Click on **File** -> **Options**. If Options is not available, choose **More Options**



Choose **Customize Ribbon**. Click on the **Developer** check box on the right list and click **OK**



Check if the **Developer** tab is available in the menu



How to Create an Interactive Dashboard with a Combo Box

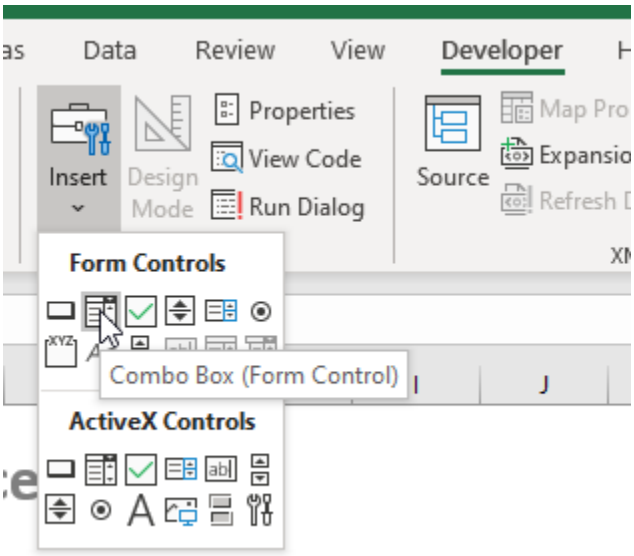
Objective: Demonstrate how to create interactive dashboards using Combo Box in Excel

Open the Excel file - Open the file named **Chart.xlsx** and click on the **Combo box** worksheet

Create an interactive dashboard with Combo Box - Create three sets of regions in column R as below:

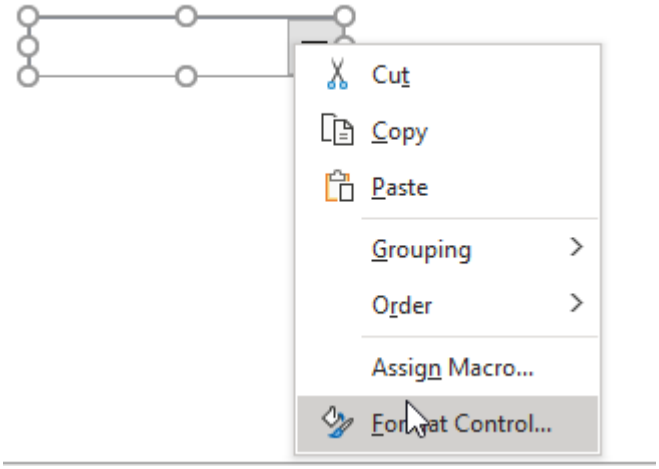
North
West
Middle

Under the Developer Tab, choose **Insert** and then **Combo Box**

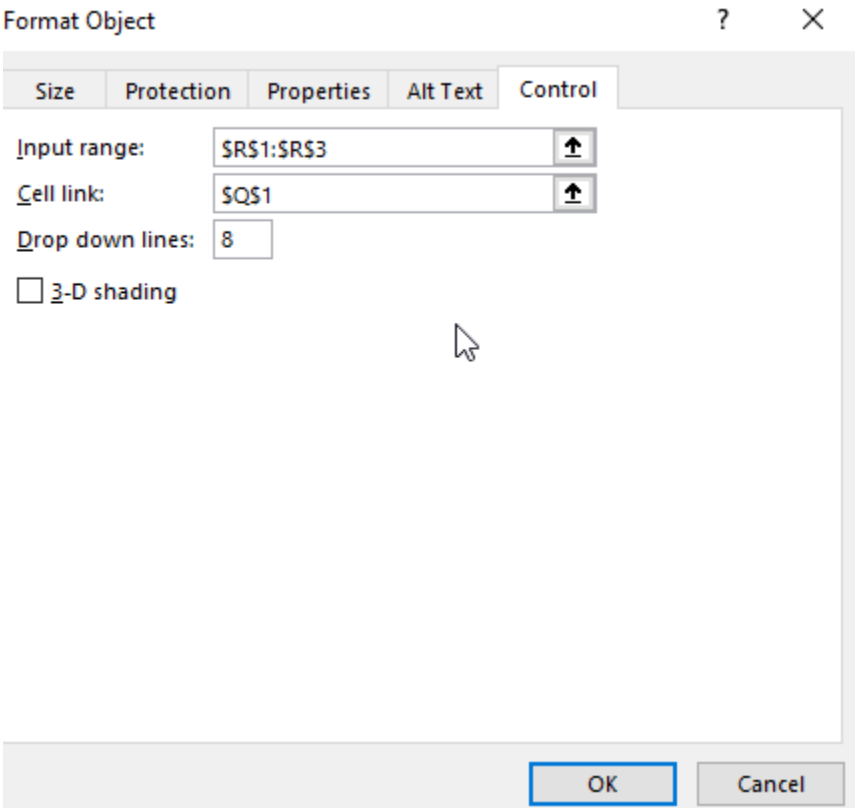


Place the **Combo Box** in any white area

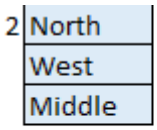
Right-click on the empty Combo Box and choose **Format Control**



Choose **Input range** and **Cell link** as shown below and click **OK**

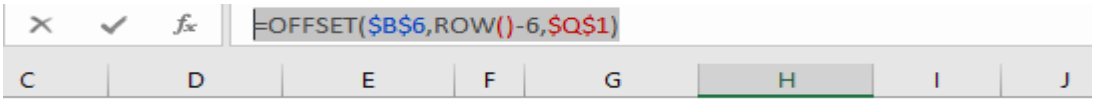


Whenever we change the combo control, the number in Q1 changes



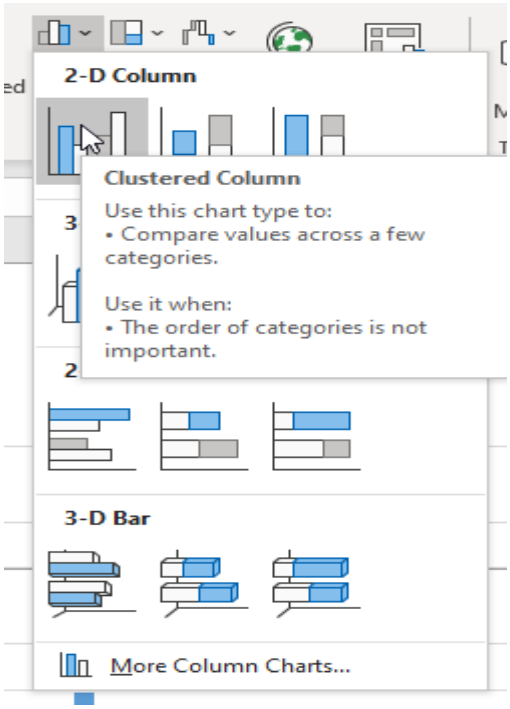
In column H7, enter the following formula and copy it over to the rest of the H rows

=OFFSET($B$6,ROW()-6,$Q$1)



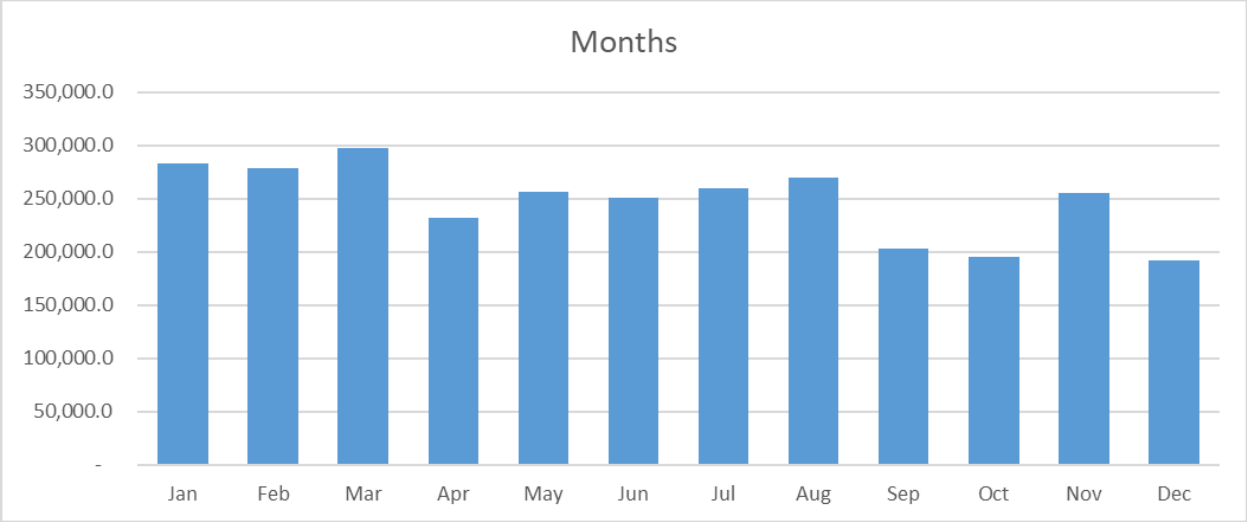
The table looks like this after the calculations:

Months	Months
Jan	283,246.0
Feb	278,532.3
Mar	297,115.5
Apr	231,685.3
May	256,641.8
Jun	250,941.3
Jul	259,804.8
Aug	269,355.5
Sep	203,022.0
Oct	195,045.0
Nov	255,637.0
Dec	191,962.8



Choose the data on the table and insert a **2-D Column** chart

The chart appears on the empty area of the sheet



On changing the values in the Combo Box, the chart changes to the region chosen