



Laxmi Charitable Trust's Sheth L.U.J College of Arts & Sir M.V. College Of Science & Commerce

PRACTICAL NO.1

AIM : Introduction to Excel Perform conditional formatting on a dataset using various criteria.

Create a pivot table to analyze and summarize data.

Use VLOOKUP function to retrieve information from a different worksheet or table.

Perform what-if analysis using Goal Seek to determine input values for desired output.

1: Perform conditional formatting on a dataset using various criteria.

Steps: 1. Select the "Salary" column (Column E).

2. Go to the Home tab on the ribbon.

3. Click on "Conditional Formatting" in the toolbar.

4. Choose "Highlight Cells Rules" and then "Greater Than."

5. Enter the threshold value as 60000.

6. Customize the formatting options (e.g., choose a fill color).

7. Click "OK" to apply the rule.

The screenshot shows an Excel spreadsheet titled 'enhanced_customer_data'. The 'Home' tab is selected in the ribbon. A context menu is open over the 'Salary' column (Column E), specifically the 'Conditional Formatting' option under the 'Format' dropdown. A sub-menu is displayed with 'Highlight Cells Rules' selected, showing sub-options like 'Greater Than...', 'Less Than...', etc. A dialog box titled 'Greater Than...' is open, prompting the user to 'Format cells that are GREATER THAN:' with a value of '60000' and a format of 'Light Red Fill with Dark Red Text'. The main spreadsheet area shows a dataset with columns: Country, Age, Education, Job Title, Salary, and Purchased. The 'Salary' column contains numerical values ranging from 34546 to 116549. The 'Purchased' column contains binary values Yes or No. The status bar at the bottom indicates the average is 70017.45, count is 121, and sum is 8402094.



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A screenshot of Microsoft Excel showing a dataset named "enhanced_customer_data". The data includes columns for Country, Age, Education, Job Title, Salary, and Purchased. Row 19 is selected, and the formula bar shows "=enhanced_customer_data[Salary]". The ribbon is visible at the top.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Country	Age	Education	Job Title	Salary	Purchased											
2	Brazil	27	High School	Nurse	40596	Yes											
3	Spain	34	PhD	Accountant	105553	No											
4	India	18	PhD	Doctor	116549	No											
5	France	55	Master's	Software Engineer	68175	No											
6	Spain	53	High School	Nurse	39009	No											
7	India	28	PhD	Sales Executive	100415	Yes											
8	Brazil	46	PhD	Doctor	89146	Yes											
9	USA	42	High School	Marketing Manager	47828	Yes											
10	USA	38	Master's	Sales Executive	62912	Yes											
11	Canada	45	Master's	Teacher	85459	No											
12	USA	58	PhD	Sales Executive	114549	No											
13	UK	23	High School	Sales Executive	34546	Yes											
14	France	37	PhD	Software Engineer	118588	Yes											
15	Japan	46	Master's	Teacher	69395	No											
16	Australia	51	High School	Data Analyst	48271	No											
17	Germany	18	Master's	Accountant	64641	Yes											
18	Canada	32	High School	Nurse	37959	No											
19	Canada	59	Bachelor's	Mechanical Engineer	42289	No											
20	India	59	Bachelor's	Marketing Manager	58547	Yes											
21	Australia	65	Bachelor's	Data Analyst	61884	No											
22	Canada	24	PhD	Software Engineer	113462	Yes											
23	Canada	34	Bachelor's	Sales Executive	62056	Yes											

2 : Create a pivot table to analyze and summarize data. Steps:

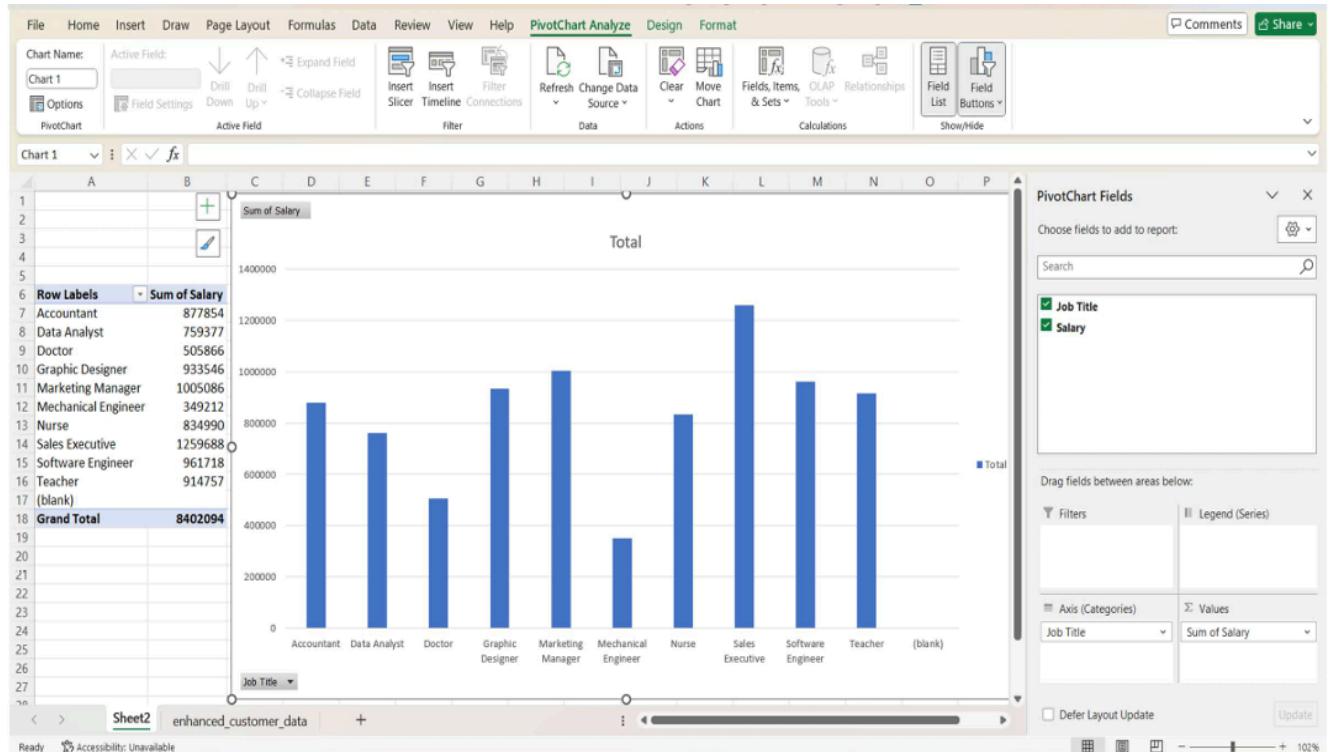
1. Select the entire dataset including headers.
2. Go to the “Insert” tab on the ribbon.
3. Click on “PivotTable”.
4. Choose where you want to place the PivotTable (e.g., new worksheet).
5. Drag “Salary” to the Rows area.
6. Drag “Job Title” to the Values area, choosing the sum function.

A screenshot of Microsoft Excel showing the "Create PivotTable" dialog box. The "Table/Range" field is set to "enhanced_customer_data!\$D:\$F". The "New Worksheet" option is selected under "Where do you want to place the PivotTable report?". The "OK" button is highlighted.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
1	Country	Age	Education	Job Title	Salary	Purchased										
2	Brazil	27	High School	Nurse	40596	Yes										
3	Spain	34	PhD	Accountant	105553	No										
4	India	18	PhD	Doctor	116549	No										
5	France	55	Master's	Software Engineer	68175	No										
6	Spain	53	High School	Nurse	39009	No										
7	India	28	PhD	Sales Executive	100415	Yes										
8	Brazil	46	PhD	Doctor	89146	Yes										
9	USA	42	High School	Marketing Manager	47828	Yes										
10	USA	38	Master's	Sales Executive	62912	Yes										
11	Canada	45	Master's	Teacher	85459	No										
12	USA	58	PhD	Sales Executive	114549	No										
13	UK	23	High School	Sales Executive	34546	Yes										
14	France	37	PhD	Software Engineer	118588	Yes										
15	Japan	46	Master's	Teacher	69395	No										
16	Australia	51	High School	Data Analyst	48271	No										
17	Germany	18	Master's	Accountant	64641	Yes										
18	Canada	32	High School	Nurse	37959	No										
19	Canada	59	Bachelor's	Mechanical Engineer	42289	No										
20	India	59	Bachelor's	Marketing Manager	58547	Yes										
21	Australia	65	Bachelor's	Data Analyst	61884	No										
22	Canada	24	PhD	Software Engineer	113462	Yes										
23	Canada	34	Bachelor's	Sales Executive	62056	Yes										



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3. Use VLOOKUP func on to retrieve informa on from a different worksheet or table.

Steps:

- Assuming your “Product Table” is in a different worksheet.
- In a cell in your main dataset, enter the formula: =VLOOKUP(“Canada”, ‘Country Table’!A:B, 2, FALSE)

The screenshot shows a Microsoft Excel spreadsheet with data in columns A through F. The data includes columns for Country, Age, Education, Job Title, Salary, and Purchased. A VLOOKUP formula is entered in cell H3: =VLOOKUP("Canada", A:F, 2, FALSE). The formula is highlighted with a green box. The result of the formula, "54", is also highlighted in a green box in cell H3. The formula is also repeated in cell H4: =Master's

A	B	C	D	E	F	G	H
Country	Age	Education	Job Title	Salary	Purchased		
Canada	54	Master's	Teacher	70977	Yes		54
USA	24	High School	Accountant	35840	Yes		Master's
Australia	22	Bachelor's	Teacher	62837	No		Teacher
France	19	Master's	Teacher	71577	Yes		70977
Brazil	20	PhD	Nurse	89035	No		Yes
France	64	Master's	Nurse	82008	Yes		
Japan	19	High School	Doctor	48144	Yes		
Canada	49	Bachelor's	Software Engineer	42649	No		
UK	61	Master's	Accountant	81479	No		
Japan	52	High School	Software Engineer	35417	No		
USA	28	High School	Data Analyst	31491	Yes		
Japan	43	PhD	Data Analyst	89753	No		
Japan	25	Master's	Software Engineer	77444	No		
Australia	26	Bachelor's	Mechanical Engineer	67940	No		
Canada	53	High School	Teacher	30782	No		
Australia	59	PhD	Nurse	115881	No		
Canada	24	Bachelor's	Accountant	63897	Yes		
India	25	Master's	Data Analyst	62514	No		
France	58	PhD	Marketing Manager	90312	Yes		



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=VLOOKUP("Canada", A:F, 4, FALSE)

A	B	C	D	E	F	G	H	I	J	K
Country	Age	Education	Job Title	Salary	Purchased					
Canada	54	Master's	Teacher	70977	Yes					
USA	24	High School	Accountant	35840	Yes					
Australia	22	Bachelor's	Teacher	62837	No					
France	19	Master's	Teacher	71577	Yes		Master's			
Brazil	20	PhD	Nurse	89035	No		Teacher			
France	64	Master's	Nurse	82008	Yes		70977			
Japan	19	High School	Doctor	48144	Yes		Yes			
Canada	49	Bachelor's	Software Engineer	42649	No					
UK	61	Master's	Accountant	81479	No					
Japan	52	High School	Software Engineer	35417	No					
USA	28	High School	Data Analyst	31491	Yes					
Japan	43	PhD	Data Analyst	89753	No					
Japan	25	Master's	Software Engineer	77444	No					
Australia	26	Bachelor's	Mechanical Engineer	67940	No					
Canada	53	High School	Teacher	30782	No					
Australia	59	PhD	Nurse	115881	No					
Canada	24	Bachelor's	Accountant	63897	Yes					
India	25	Master's	Data Analyst	62514	No					
France	58	PhD	Marketing Manager	90312	Yes					

4: Perform what-if analysis using Goal Seek to determine input values for desired output.

Steps: 1. Identify the cell containing the formula for "Simulated Profit". This cell is G2

2. Go to the "Data" tab on the ribbon.

3. Click on "What-If Analysis" and select "Goal Seek"

4. In the dialog box: Set "Set cell" to G2 (your formula cell), "To value" to 1000, and "By changing cell" to E2 (your Salary input cell).

5. Click "OK" to let Excel determine the required Salary.

A	B	C	D	E	F	G	H	I
Country	Age	Education	Job Title	Salary	Purchased	Simulated Profit		
Canada	54	Master's	Teacher	70977	100000	-29023		
USA	24	High School	Accountant	35840	Yes			
Australia	22	Bachelor's	Teacher	62837	No			
France	19	Master's	Teacher	71577	Yes		Master's	
Brazil	20	PhD	Nurse	89035	No		Teacher	
France	64	Master's	Nurse	82008	Yes		70977	
Japan	19	High School	Doctor	48144	Yes			
Canada	49	Bachelor's	Software Engineer	42649	No			
UK	61	Master's	Accountant	81479	No			
Japan	52	High School	Software Engineer	35417	No			
USA	28	High School	Data Analyst	31491	Yes			
Japan	43	PhD	Data Analyst	89753	No			
Japan	25	Master's	Software Engineer	77444	No			
Australia	26	Bachelor's	Mechanical Engineer	67940	No			
Canada	53	High School	Teacher	30782	No			
Australia	59	PhD	Nurse	115881	No			
Canada	24	Bachelor's	Accountant	63897	Yes			
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France	58	PhD	Marketing Manager	90312	Yes			



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	A	B	C	D	E	F	G	H	I
1	Country	Age	Education	Job Title	Salary	Purchased	Simulated Profit		
2	Canada	54	Master's	Teacher	110000	100000	10000		
3	USA	24	High School	Accountant	35840	Yes		54	
4	Australia	22	Bachelor's	Teacher	62837	No		Master's	
5	France	19	Master's	Teacher	71577	Yes		Teacher	
6	Brazil	20	PhD	Nurse	89035	No		110000	
7	France	64	Master's	Nurse	82008	Yes		100000	
8	Japan	19	High School	Doctor	48144	Yes			
9	Canada	49	Bachelor's	Software Engineer	42649	No			
10	UK	61	Master's	Accountant	81479	No			
11	Japan	52	High School	Software Engineer	35417	No			
12	USA	28	High School	Data Analyst	31491	Yes			
13	Japan	43	PhD	Data Analyst	89753	No			
14	Japan	25	Master's	Software Engineer	77444	No			
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