

How can I use Excel to create a formula for calculating the sum of numbers if they are less than a specific value?

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Excel is a powerful tool that can be used to create formulas for various calculations. One such formula is the calculation of the sum of numbers that are less than a specific value. This can be done using the SUMIF function in Excel, which allows you to specify a range of values and criteria to sum only those values that meet the specified criteria. By using this formula, you can easily calculate the total sum of numbers that are less than a specific value, saving time and effort in manual calculations.

Excel: A Formula for "Sum If Less Than"

You can use the following formula in Excel to sum all values in a range that are less than a particular value:

=SUMIF(B2:B13, "<100")

This particular formula sums all of the values in the range B2:B13 that are less than 100.

The following example shows how to use this formula in practice.

Example: Use "Sum If Less Than" in Excel

Suppose we have the following dataset in Excel that contains information about sales made by various employees at some company:

	A	B	C	D	E	F
1	Employee Sales					
2	Andy	22				
3	Bob	14				
4	Chad	10				
5	Derrick	9				
6	Eric	8				
7	Frank	11				
8	George	1459				
9	Harry	20				
10	Isaac	22				
11	John	10				
12	Kendall	15				
13	Liam	27				
14						
15						
16						
17						
18						
19						
20						
21						

We can use the following formula to sum all of the values in the Sales column that are less than 100:

=SUMIF(B2:B13, "<100")

The following screenshot shows how to use this formula in practice:

D2				fx	=SUMIF(B2:B13, "<100")
	A	B	C	D	E
1	Employee	Sales		Sum of Sales Less Than 100	
2	Andy	22		168	
3	Bob	14			
4	Chad	10			
5	Derrick	9			
6	Eric	8			
7	Frank	11			
8	George	1459			
9	Harry	20			
10	Isaac	22			
11	John	10			
12	Kendall	15			
13	Liam	27			
14					
15					
16					
17					
18					
19					
20					

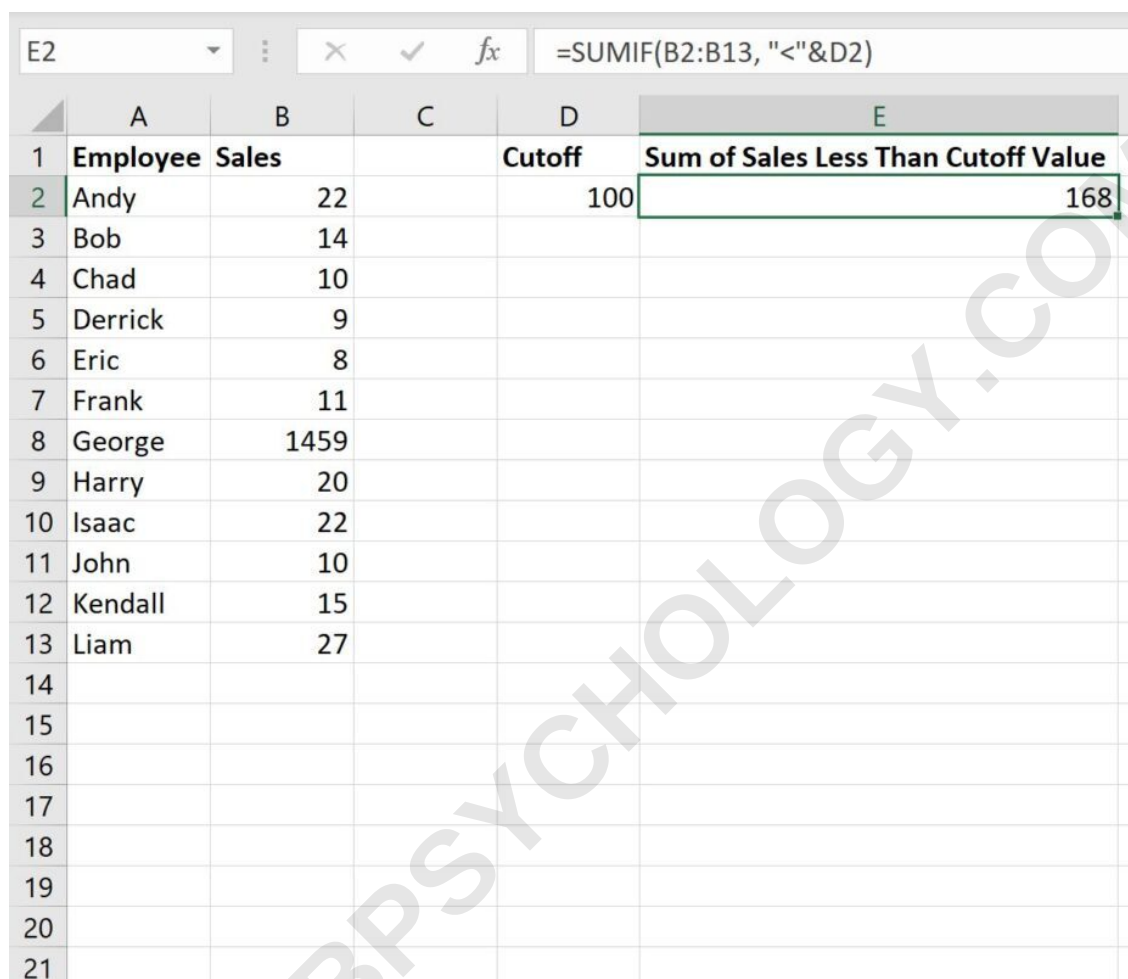
We can see that the sum of the values in the Sales column that are less than 100 is 168.

Note that you could also use a cell reference in the formula.

For example, we could use the following formula to sum the values in the Sales column that are less than the value in cell D2:

=SUMIF(B2:B13, "<"&D2)

The following screenshot shows how to use this formula in practice:



The screenshot shows an Excel spreadsheet with the following data and formula:

	A	B	C	D	E
1	Employee	Sales		Cutoff	Sum of Sales Less Than Cutoff Value
2	Andy	22		100	168
3	Bob	14			
4	Chad	10			
5	Derrick	9			
6	Eric	8			
7	Frank	11			
8	George	1459			
9	Harry	20			
10	Isaac	22			
11	John	10			
12	Kendall	15			
13	Liam	27			
14					
15					
16					
17					
18					
19					
20					
21					

The formula bar shows the formula: `=SUMIF(B2:B13, "<"&D2)`

Note: To calculate the sum of values equal to or less than a certain value, use "`<=`" in the formula instead.

The following tutorials explain how to perform other common tasks in Excel: