



**BATCH** : **BATCH 47 DATA SCIENCE**  
**LESSON** : **GOOGLE SHEETS**  
**DATE** : **21.12.2021**  
**SUBJECT** : **SORT, FILTER, IF**



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# **SORT AND FILTER**



# SORT AND FILTER

New Spreadsheet

File Edit View Insert Format **Data** Tools Add-ons Help Last edit was 2 min

125% £ .0

19/03/2020

	A	B
1	<b>Product</b>	<b>Date Sold</b>
2	Computer	01/01/2020
3	Mouse	04/01/2020
4	Laptop	12/02/2020
5	Smartphone	19/03/2020
6	Speakers	06/02/2020
7	Headset	22/02/2020
8	Monitor	14/01/2020
9		
10		

Sort sheet by **column B**, A → Z

Sort sheet by **column B**, Z → A

Sort range by **column B**, A → Z

Sort range by **column B**, Z → A

**Sort range**

Create a filter

Filter views

Slicer [New](#)

Data validation



# SORT AND FILTER

## Sort range from A1 to C8

☒ Data has header row

Sort by 

Product ▾

☒ A → Z ☐ Z → A

Add another sort column

Cancel

Sort



# SORT AND FILTER

Sort range from A1 to C8

☒ Data has header row

Sort by 

Product

☒ A → Z ☐ Z → A

Add another sort column

Cancel

Sort



# SORT AND FILTER

Sort range from A1 to C8



☒ Data has header row

Sort by

Product ▼

☒ A → Z

☐ Z → A

1

then by

Price ▼

☒ A → Z

☐ Z → A

2



Add another sort column

Cancel

Sort



# IF CONDITIONS





# IF CONDITIONS

## Logical Operators in Excel

Operator Symbol	Operator Name	Description
<b>=</b>	<b>Equal to</b>	Compares One Value to Other Value
<b>&gt;</b>	<b>Greater Than</b>	Tests whether the value is greater than certain value or not
<b>&lt;</b>	<b>Less Than</b>	Tests whether the value is less than certain value or not
<b>&gt;=</b>	<b>Greater Than or Equal To</b>	Tests whether the value is greater than or equal to certain value or not
<b>&lt;=</b>	<b>Less Than or Equal To</b>	Tests whether the value is less than or equal to certain value or not
<b>&lt;&gt;</b>	<b>Not Equal To</b>	Tests whether particular value is not equal to certain value





# IF CONDITIONS

## IF Functions

=IF(logical\_expression, true\_value, false\_value)

A spreadsheet calculates the value of an IF function by first **evaluating the logical expression**.

If the expression is **TRUE**, then the first value in the function is used.

If the expression is **FALSE**, then the second value in the function is used.

= IF (Cell C2 >= Cell D2, "Yes it is", "No it isn't")

i.e.

When C2 is 9 and D2 is 7, the result = "Yes it is"

When C2 is 3 and D2 is 5, the result = "No it isn't"



# IF CONDITIONS

=if(A2=200,1,2)

A	B	C
Data	Formula	Result
100	1	=if(A2=100,1,2)
200	2	=if(A2=200,1,2)
300	FALSE	=if(A2=200,1)
Yes	20,000	=if(A5="Yes",A2*A3,A4/A3)
No	1.5	=if(A6="Yes",A2*A3,A4/A3)
	Acceptable	=if(A2<=100,"Acceptable","Too Much")
	Too Much	=if(A3>=100,"Too Much","Acceptable")



# IFS CONDITIONS

C2	<i>fx</i>	=IFS(B2<50,"Fail",B2<80,"Pass",B2>=80,"Pass with distinction")		
	A	B	C	
1	Student	Result	Grade	
2	Bob	70	Pass	
3	Jenny	90	Pass with distinction	
4	Malik	86	Pass with distinction	
5	Sue	49	Fail	
6				






# IFS CONDITIONS

## SUMIF


Clipboard

Font

F1

=SUMIF(A2:A6,D2,C2:C6)

	A	B	C	D	E	F
1	Year	Date	Value	Criteria		218.6
2	2000	8/1/2000	10.5	2000		
3	2003	5/12/2003	7.2			
4	2000	3/12/2000	200			
5	2001	7/30/2001	5.4			
6	2000	2/28/2000	8.1			
7						



# IFS CONDITIONS

## AVERAGEIF




G3		:	X	✓	fx	=COUNTIF(\$B\$2:\$B\$11,"<>Joe")	
B9							
	A		A	B	C	F	G
1	Banana	1	Product	Sales Rep	Quantity		
2	Strawberry	2	Product A	Joe	9		Result
3	Apple	3	Product B	Jane	9		7
4	Pear	4	Product C	Martha	10		
5	Kiwi	5	Product D	Joe	4		
6	Raspberry	6	Product E	Jane	11		
7	Apple	7	Product F	Joe	3		
8		8	Product G	Charlie	4		
9		9	Product H	Bob	7		
10		10	Product I	Tom	9		
		11	Product J	Bob	5		
		12					





# IFS CONDITIONS

## COUNTIF

G3		:	  	=COUNTIF(\$B\$2:\$B\$11,"<>Joe")	
	A	B	C	F	G
1	Product	Sales Rep	Quantity		
2	Product A	Joe	9		
3	Product B	Jane	9		
4	Product C	Martha	10		
5	Product D	Joe	4		
6	Product E	Jane	11		
7	Product F	Joe	3		
8	Product G	Charlie	4		
9	Product H	Bob	7		
10	Product I	Tom	9		
11	Product J	Bob	5		
12					

Result
7