

Computing

Lesson 5: Level up your Data Skills

Spreadsheets

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Materials from the Teach Computing Curriculum created by the National Centre for Computing Education



Example of AVERAGE

AVERAGE formula can work out the average of a set of data.

=AVERAGE(D4:D9)

- Notice at the top the formula bar shows your formula.

fx =AVERAGE(D4:D9)					
	A	B	C	D	
1					
2			Exam Marks		
3					
4			A	2	
5			B	2	
6			C	2	
7			D	2	
8			E	3	
9			U	3	
10			AVERAGE	=AVERAGE(D4:D9)	
11			COUNTIF		
12			IF		
13					

Credit: Google Sheets screenshot: Halima Bhayat



Example of COUNTIF

- COUNTIF can help you to find out how many of the same data there is by counting it for you.

=COUNTIF(D4:D9)

fx	=countif(D4:D9,2)				
	A	B	C	D	
1					
2			Exam Marks		
3					
4			A	2	
5			B	2	
6			C	2	
7			D	2	
8			E	3	
9			U	3	
10			AVERAGE	2.333333333	
11			COUNTIF	? =countif(D4:D9,2)	
12			IE		

Credit: Google Sheets screenshot: Halima Bhayat



Example of IF

An IF formula provides and analyses two outcomes. A true and a false outcome.

=IF(D4=3, "Well Done", "Try again")

IF the value in D4 is equal to 3 then say well done else say try again.

- Why not use a **autofill**

fx =IF(D4=3,"Well done","Try again")							
	A	B	C	D	E	F	
1							
2			Exam Marks				
3							
4			A		=IF(D4=3,"Well done","Try again")		
5			B	2			
6			C	2			
7			D	2			
8			E	3			
9			U	3			
10			AVERAGE	2.333333333			
11			COUNTIF	4			
12							

Credit: Google Sheets screenshot: Halima Bhayat



Task 1 - Practise AVERAGE, COUNTIF and IF formula

	A	B	C	D	E
1					
2			Exam Marks		
3					
4			A	2	IF formula will go here, use autofill for the rest of the cells
5			B	2	
6			C	2	
7			D	2	
8			E	3	
9			U	3	
10			AVERAGE		
11			COUNTIF		
12					

Credit: Google Sheets screenshot: Halima Bhayat



Practise AVERAGE, COUNTIF and IF formulas

- Create the spreadsheet shown and add the **AVERAGE, COUNTIF** and **IF** formula in.
- Try autofill once you have typed the first IF formula.
- Add colour to make your spreadsheet look more interesting.
- Why not add a border around your table.

	A	B	C	D	E
1					
2			Exam Marks		
3					
4			A	2	IF formula will go here, Use autofill for the rest of the cells
5			B	2	
6			C	2	
7			D	2	
8			E	3	
9			U	3	
10			AVERAGE		
11			COUNTIF		
12					

Credit: Google Sheets screenshot: Halima Bhayat



Task 2 - Sorting and filtering

Exam Marks		
A	2	Try again
B	2	Try again
C	2	Try again
D	2	Try again
E	3	Well done
U	3	Well done
AVERAGE	2.3333333333	
COUNTIF	4	

Credit: Google Sheets screenshot: Halima Bhayat



Sorting and Filtering

Sort: Highlight D4:D9 numbers and sort these A-Z.

Filter: Use the filter tool to look for all pupils who did well in there exam.

Exam Marks		
A	2	Try again
B	2	Try again
C	2	Try again
D	2	Try again
E	3	Well done
U	3	Well done
AVERAGE	2.333333333	
COUNTIF	4	

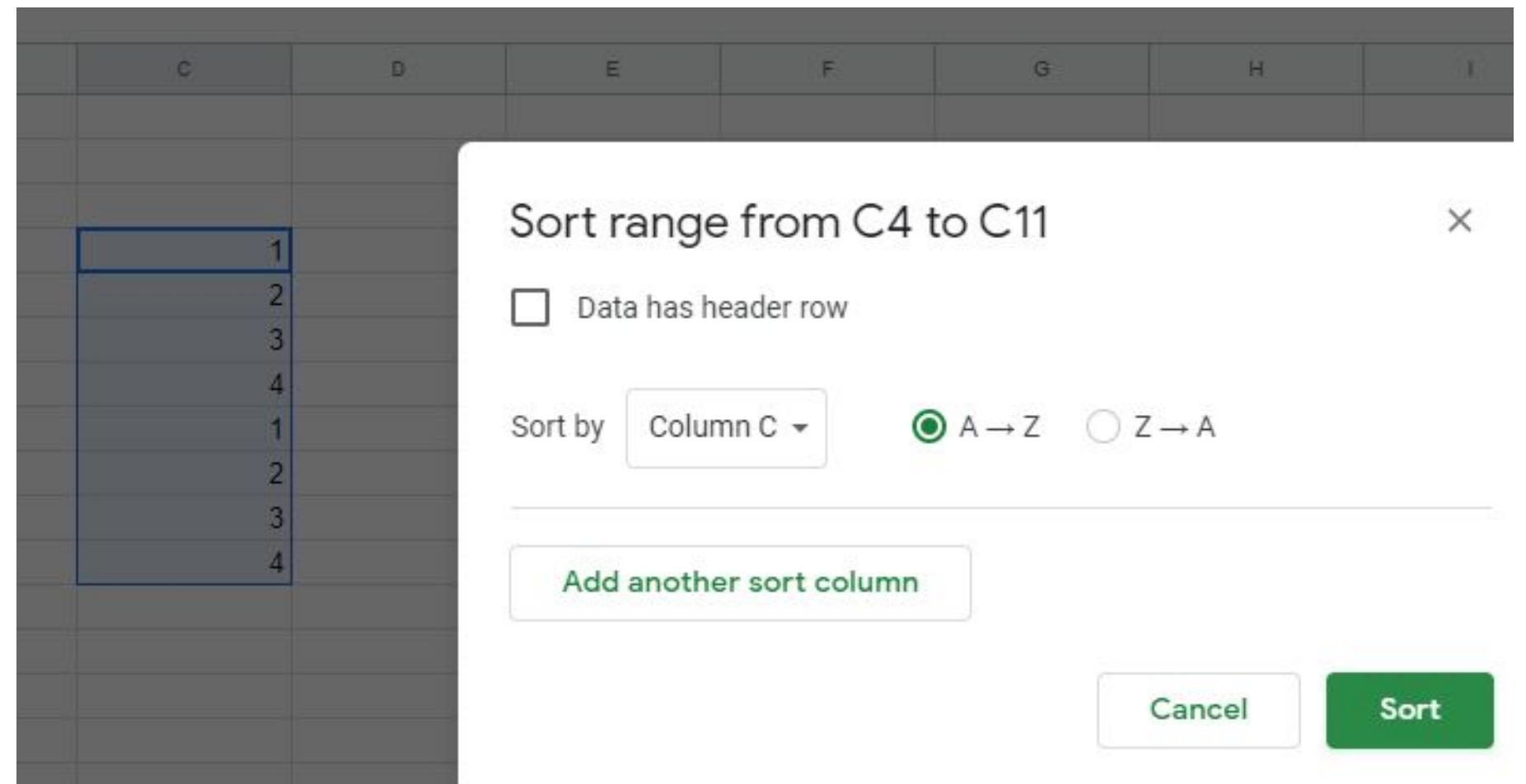
Credit: Google Sheets screenshot: Halima Bhayat



Sorting Data

- Data can be sorted into a particular order.
 - **Ascending** - A to Z
 - **Descending** - Z to A


Highlight and right click to sort. Then select your range as seen.

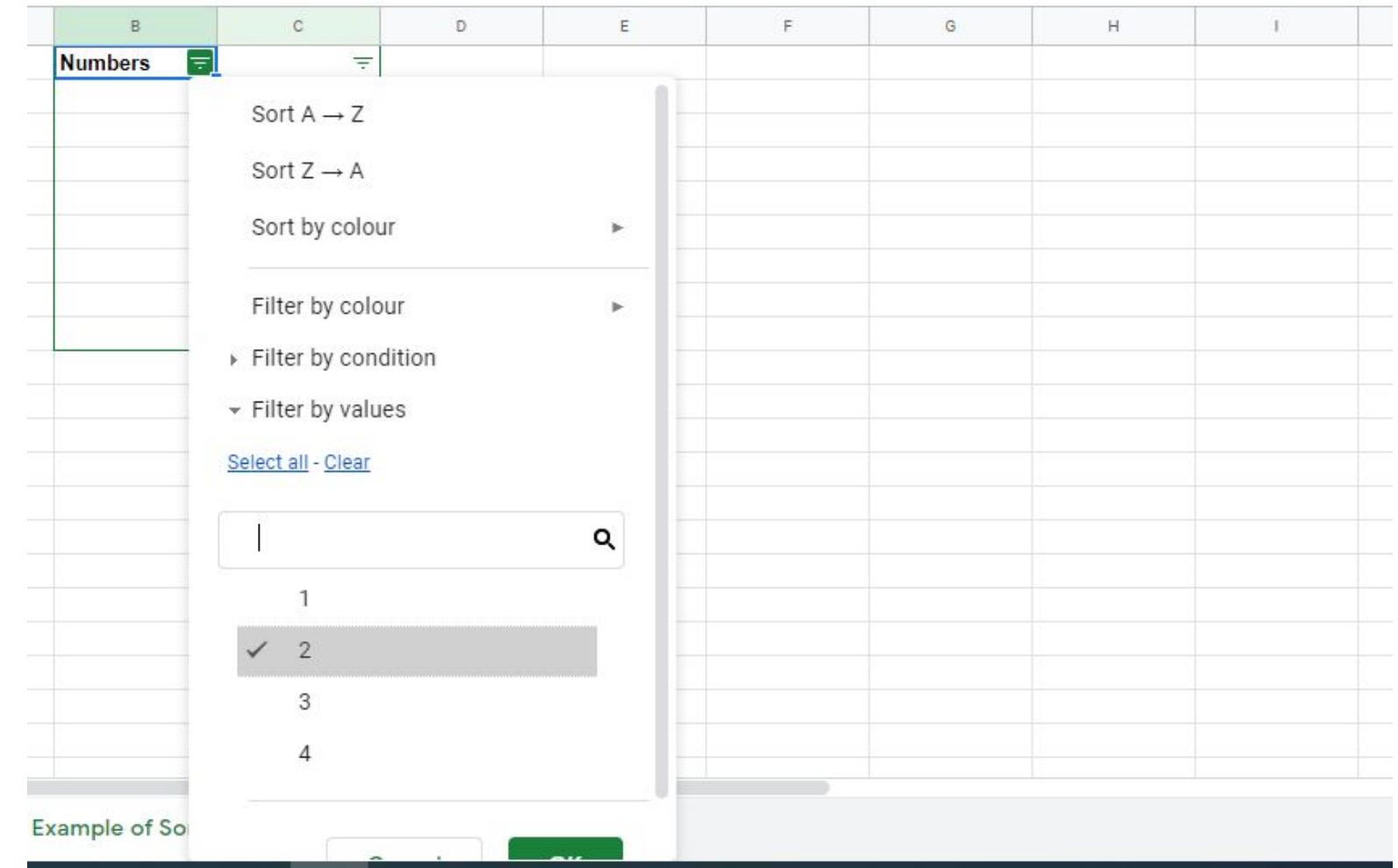


Credit: Google Sheets screenshot: Halima Bhayat



Filtering Data

- A filter helps you find information that you want to see and hide the rest.
- Highlight information to filter and click to turn on the filter tool. 
- Select from the column what you would like to see by ensuring there is a tick next to the item as shown in the image.



Credit: Google Sheets screenshot: Halima Bhayat

