

BATCH LESSON DATE

**BATCH 47 DATA SCIENCE** 

**GOOGLE SHEETS** 

21.12.2021

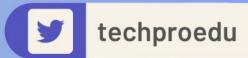
SUBJECT: SORT, FILTER, IF

techproeducation









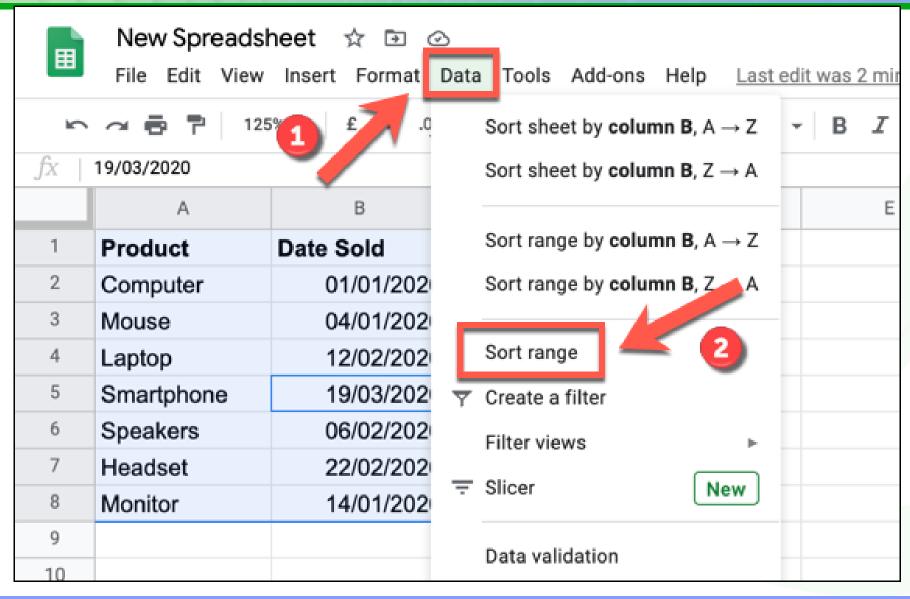




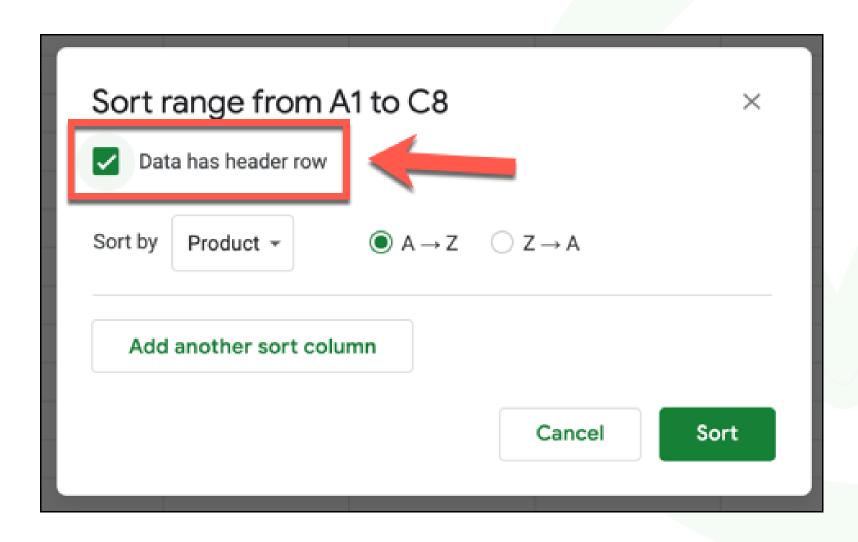




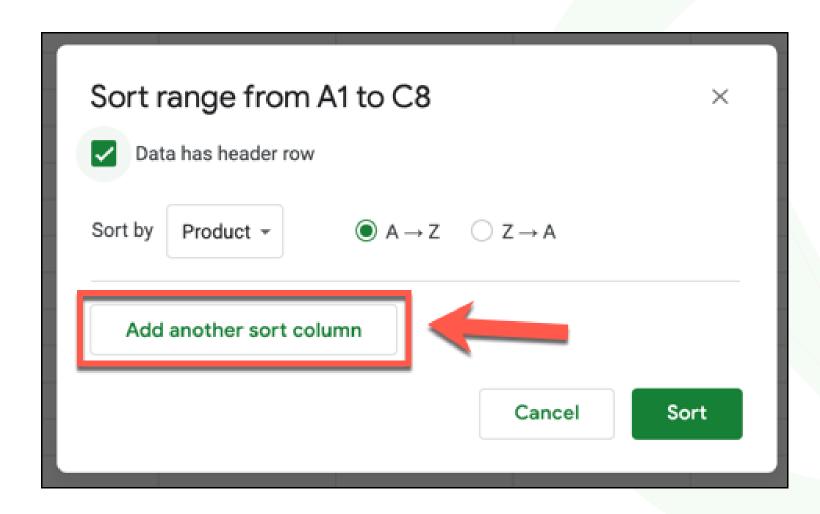




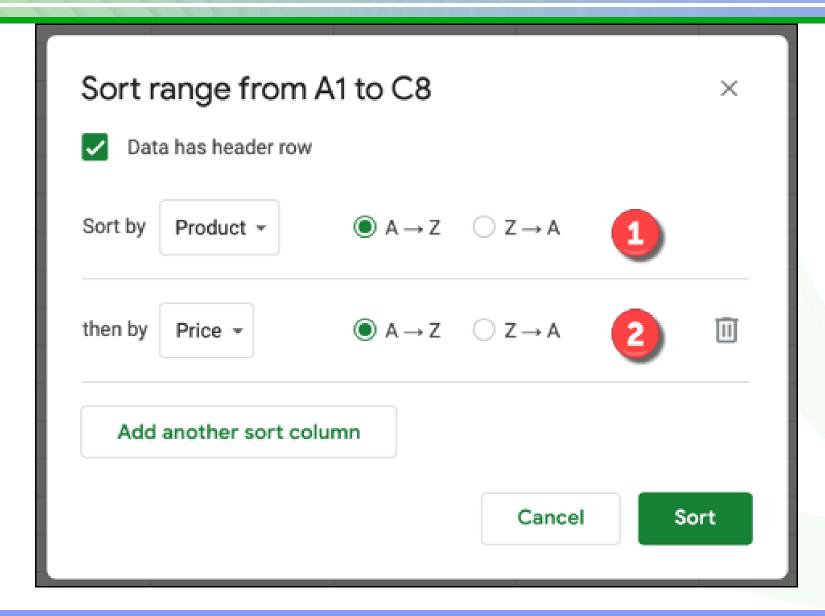
















# Logical Operators in Excel

| Operator<br>Symbol | Operator Name            | Description   |  |  |  |
|--------------------|--------------------------|---|--|--|--|
|                    | Equal to                 | Compares One Value to Other Value                                       |  |  |  |
| >                  | Greater Than             | Tests whether the value is greater than certain value or not            |  |  |  |
| <                  | Less Than                | Tests whether the value is less than certain value or not               |  |  |  |
| >=                 | Greater Than or Equal To | Tests whether the value is greater the or equal to certain value or not |  |  |  |
| <=                 | Less Than or<br>Equal To | Tests whether the value is less than or equal to certain value or not   |  |  |  |
| <>                 | Not Equal To             | Tests whether particular value is not equal to certain value            |  |  |  |



#### 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(A2=200,1,2)

| Α    | В          | 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 Mu |
|      | Too Much   | =if(A3>=100,"Too Much","Acceptab |
|      |            |                                  |



| 2 | + $fx$ =IFS(B2<50 | 0, "Fail", B2<80, "Pass", | ,B2>=80, "Pass with distinction") |
|---|-------------------|---------------------------|-----------------------------------|
|   | А                 | В                         | С                                 |
| 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 |                   |                           |                                   |

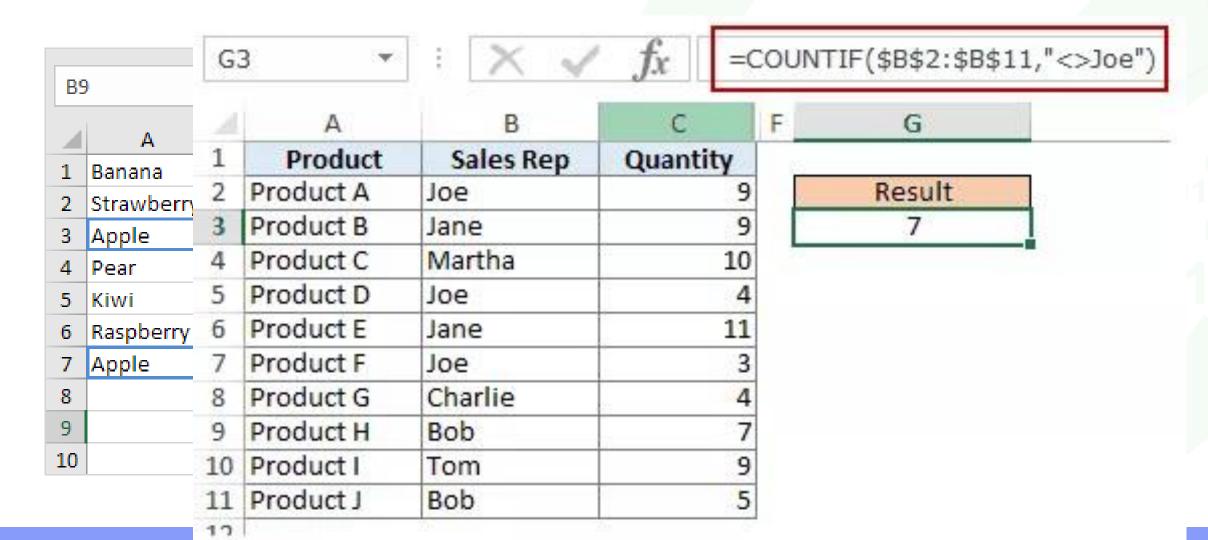


# **SUMIF**

|   | Clipbo | ard 5     |       | Font     |          | Ľ.         |   |
|---|--------|-----------|-------|----------|----------|------------|---|
| F | L      | ·     >   | < √ f | s =SUM   | IF(A2:A6 | ,D2,C2:C6) |   |
| 4 | А      | В         | С     | D        | Е        | F          | e |
| 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 |        |           |       |          |          |            |   |
| - |        |           |       |          |          |            |   |



## **AVERAGEIF**





## COUNTIF

