

# What is the syntax for the Excel IF function?

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June 29, 2024

## RECOMMENDED CITATION

stats writer (2024). *What is the syntax for the Excel IF function?*. PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=157979>

The Excel IF function is a conditional function in Microsoft Excel that allows users to perform a logical test and return one value if the test is true, and another value if the test is false. The syntax for the IF function is =IF(logical\_test, value\_if\_true, value\_if\_false), where the logical\_test is the condition that is being evaluated, the value\_if\_true is the value to be returned if the condition is met, and the value\_if\_false is the value to be returned if the condition is not met. The IF function is commonly used in Excel formulas to automate decision-making processes based on specific criteria.

## Excel IF Function

### IF Function

The **IF** function is a premade function in Excel, which returns values based on a **true** or **false** condition.

It is typed =IF and has 3 parts:

=IF(logical\_test, , )

The **condition** is referred to as logical\_test, which can check things like:

If a number is **greater than** another number > If a number is **smaller than** another number < If a number or text is **equal** to something =

**Note:** You can decide both the return values and the condition.

**Note:** The different parts of the function are separated by a symbol, like comma , or semicolon ;

The symbol depends on your Language Settings.

### Example IF function (equal to)

Check if the Pokemon type is grass:

The condition is if the "Type 1" value for the Pokemon is "Grass".

The function returns "Yes" or "No".

	A	B	C	D	E
1	Name	Type 1	Total	Grass Type	
2	Bulbasaur	Grass	318		
3	Ivysaur	Grass	405		
4	Venusaur	Grass	525		
5	Charmander	Fire	309		
6	Charmeleon	Fire	405		
7	Charizard	Fire	534		
8	Squirtle	Water	314		
9	Wartortle	Water	405		
10	Blastoise	Water	530		
11					

Example **IF** function, step by step:

Select the cell **D2** Type **=IF** Double click the **IF** command

	A	B	C	D	E	F	G	H	I	J	K
1	Name	Type 1	Total	Grass Type							
2	Bulbasaur	Grass	318	=IF							
3	Ivysaur	Grass	405	IF	Checks whether a condition is met, and returns one value if TRUE, and another value if FALSE						
4	Venusaur	Grass	525	IFERROR							
5	Charmander	Fire	309	IFNA							
6	Charmeleon	Fire	405	IFS							
7	Charizard	Fire	534								
8	Squirtle	Water	314								
9	Wartortle	Water	405								
10	Blastoise	Water	530								
11											

Specify the condition **B2="Grass"** Type **Yes** , Specify the value **"Yes"** for when the condition is **TRUE** Type **No** , Specify the value **"No"** for when the condition is **FALSE** Hit enter

	A	B	C	D	E	F	G
1	Name	Type 1	Total	Grass Type			
2	Bulbasaur	Grass	318	=IF(B2="Grass"; "Yes"; "No")			
3	Ivysaur	Grass	405	IF (logical_test; [value_if_true]; [value_if_false])			
4	Venusaur	Grass	525				
5	Charmander	Fire	309				
6	Charmeleon	Fire	405				
7	Charizard	Fire	534				
8	Squirtle	Water	314				
9	Wartortle	Water	405				
10	Blastoise	Water	530				
11							

Since the value in cell B2 is "Grass", the condition is **true** and the function will return "Yes".

**Note:** Text values needs to be in quotes: " "

The function can be repeated with the filling function for each row to perform the same check for each Pokemon:

	A	B	C	D	E
1	Name	Type 1	Total	Grass Type	
2	Bulbasaur	Grass	318	=IF(B2="Grass"; "Yes"; "No")	
3	Ivysaur	Grass	405	=IF(B3="Grass"; "Yes"; "No")	
4	Venusaur	Grass	525	=IF(B4="Grass"; "Yes"; "No")	
5	Charmander	Fire	309	=IF(B5="Grass"; "Yes"; "No")	
6	Charmeleon	Fire	405	=IF(B6="Grass"; "Yes"; "No")	
7	Charizard	Fire	534	=IF(B7="Grass"; "Yes"; "No")	
8	Squirtle	Water	314	=IF(B8="Grass"; "Yes"; "No")	
9	Wartortle	Water	405	=IF(B9="Grass"; "Yes"; "No")	
10	Blastoise	Water	530	=IF(B10="Grass"; "Yes"; "No")	
11				IF (logical_test; [value_if_true]; [value_if_false])	
12					

Now, each row has a check for Grass Type:

	A	B	C	D	E
1	Name	Type 1	Total	Grass Type	
2	Bulbasaur	Grass	318	Yes	
3	Ivysaur	Grass	405	Yes	
4	Venusaur	Grass	525	Yes	
5	Charmander	Fire	309	No	
6	Charmeleon	Fire	405	No	
7	Charizard	Fire	534	No	
8	Squirtle	Water	314	No	
9	Wartortle	Water	405	No	
10	Blastoise	Water	530	No	
11					

### Example IF Function (greater than)

Check if the Pokemon's total stats is **greater than** 500:

The function returns "Yes" or "No".

	A	B	C	D	E
1	Name	Type 1	Total	More than 500 Total Stats	
2	Bulbasaur	Grass	318		
3	Ivysaur	Grass	405		
4	Venusaur	Grass	525		
5	Charmander	Fire	309		
6	Charmeleon	Fire	405		
7	Charizard	Fire	534		
8	Squirtle	Water	314		
9	Wartortle	Water	405		
10	Blastoise	Water	530		
11					

Example **IF** function, step by step:

Select the cell D2 Type =IF Double click the **IF** command

	A	B	C	D	E	F	G	H	I
1	Name	Type 1	Total	More than 500 Total Stats					
2	Bulbasaur	Grass	318	=IF					
3	Ivysaur	Grass	405						
4	Venusaur	Grass	525						
5	Charmander	Fire	309						
6	Charmeleon	Fire	405						
7	Charizard	Fire	534						
8	Squirtle	Water	314						
9	Wartortle	Water	405						
10	Blastoise	Water	530						
11									

Specify the condition `C2>500` Type , Specify the value "Yes" for when the condition is **TRUE**Type , Specify the value "No" for when the condition is **FALSE**Hit enter

	A	B	C	D	E
1	Name	Type 1	Total	More than 500 Total Stats	
2	Bulbasaur	Grass	318	=IF(C2>500; "Yes"; "No")	
3	Ivysaur	Grass	405		
4	Venusaur	Grass	525		
5	Charmander	Fire	309		
6	Charmeleon	Fire	405		
7	Charizard	Fire	534		
8	Squirtle	Water	314		
9	Wartortle	Water	405		
10	Blastoise	Water	530		
11					

Since the value in cell `C2` is 318, the condition is **false** and the function will return "No".

The function can be repeated with the filling function for each row to perform the same check for each Pokemon:

	A	B	C	D	E
1	Name	Type 1	Total	More than 500 Total Stats	
2	Bulbasaur	Grass	318	=IF(C2>500; "Yes"; "No")	
3	Ivysaur	Grass	405	=IF(C3>500; "Yes"; "No")	
4	Venusaur	Grass	525	=IF(C4>500; "Yes"; "No")	
5	Charmander	Fire	309	=IF(C5>500; "Yes"; "No")	
6	Charmeleon	Fire	405	=IF(C6>500; "Yes"; "No")	
7	Charizard	Fire	534	=IF(C7>500; "Yes"; "No")	
8	Squirtle	Water	314	=IF(C8>500; "Yes"; "No")	
9	Wartortle	Water	405	=IF(C9>500; "Yes"; "No")	
10	Blastoise	Water	530	=IF(C10>500; "Yes"; "No")	
11				IF (logical_test; [value_if_true]; [value_if_false])	
12					

Now, each row has a check for having more than 500 total stats:

	A	B	C	D	E
1	Name	Type 1	Total	More than 500 Total Stats	
2	Bulbasaur	Grass	318	No	
3	Ivysaur	Grass	405	No	
4	Venusaur	Grass	525	Yes	
5	Charmander	Fire	309	No	
6	Charmeleon	Fire	405	No	
7	Charizard	Fire	534	Yes	
8	Squirtle	Water	314	No	
9	Wartortle	Water	405	No	
10	Blastoise	Water	530	Yes	
11					

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