## |x| BOARDFLARE

## Python for Excel

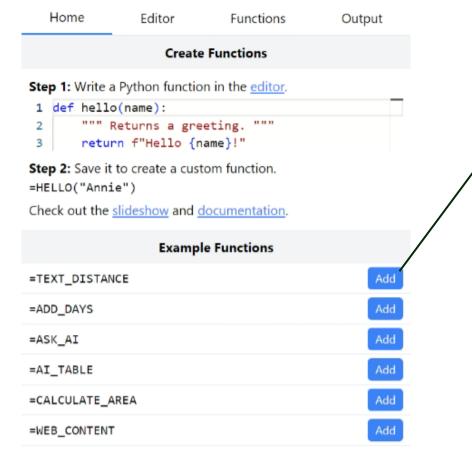
Version 1.3

March 16, 2025

### Welcome to Python for Excel!

- Creates Excel custom functions from Python functions.
  - E.g. =HELLO(name) from def hello(name): ....
  - For general Python scripts, try <u>Excel PY</u> instead.
- Key points:
  - Your Python code MUST BE A FUNCTION!
  - You can NOT load local files (e.g. C:\Users\Joe\Data.csv)
  - You can load internet files using requests library, but server must add CORS headers, e.g. Access-Control-Allow-Origin: \*
- Support:
  - Please contact us with your questions.

### Home tab



Adds example function and demo sheet to your workbook.

Please email us. We're happy to help!



Logout

Email Us! 🟥

Login to your Microsoft account.

#### Editor Home **Functions** Output Editor tab 1 def hello(name): """ Returns a greeting. 3 return f"Hello {name}!" Arguments to test the function. Code must be function 6 test\_cases = [ as this will be called ["Nancy"], ["Ming"] 8 from Excel. 9 10 11 # Excel usage: =HELLO("Nancy") Runs code with test cases. Saves function, NO AUTO-SAVE Launch AI dialog to Selects workbook create function. function to edit. hello

# Function Dialog Launch

```
Editor
                           Functions
                                          Output
   Home
 1 def convert_to_uppercase(input_str):
       Converts a single string or a 2D list of strings to up;
       if isinstance(input_str, str):
           return input_str.upper()
       elif isinstance(input_str, list):
           return [[s.upper() for s in row] for row in input_s
 8
 9
       else:
10
           return None
11
12 test_cases = [
       ["hello"],
       [[["hello", "world"], ["python", "function"]]],
14
15
       [None],
16
       [True],
       [[[1.5, "test"], ["example", "case"]]]
17
18
```

After function is saved, you can launch function dialog to run it.

CONVERT\_TO\_UPPERCASE(input\_str) saved!

**Run Function** 

convert\_to\_uppercase 🗸

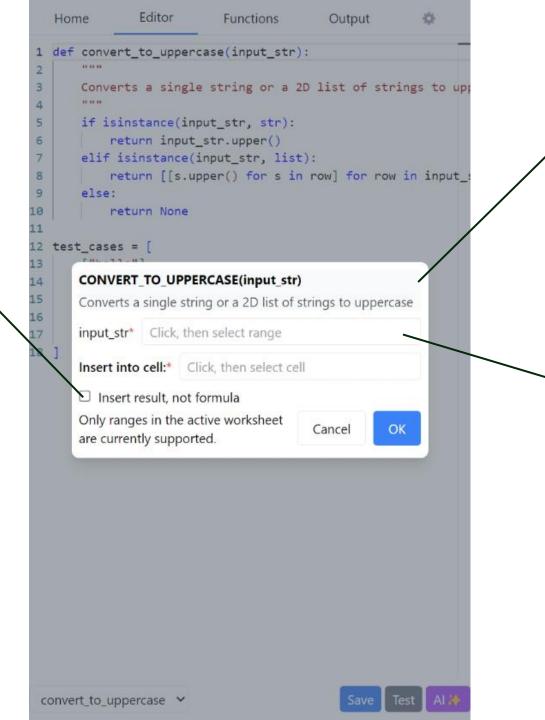






# Using Function Dialog

This calculates result first, then inserts it into cell.
Use if you don't want recalculation.



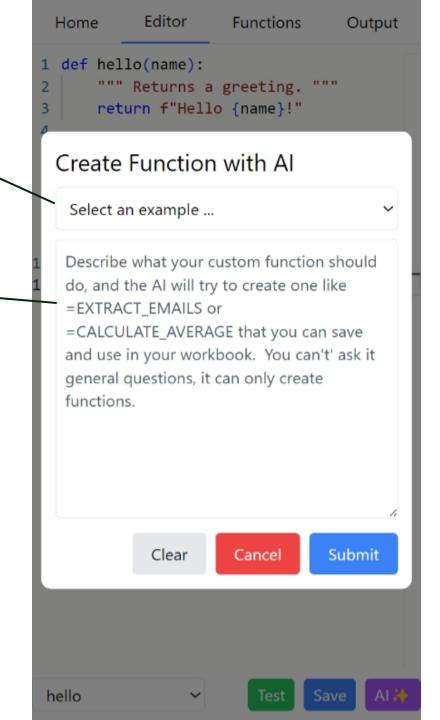
This is similar to Excel function dialog, except it only works with ranges

Click input field to activate range selection, then pick range on the active worksheet ONLY.

### Al coding

Select an example prompt

Describe your function.



```
Editor
 Home
                       Functions
                                     Output
1 def hello(name):
      """ Returns a greeting.
      return f"Hello {name}!"
5 # Arguments to test the function.
6 test cases = [
      ["Nancy"]
 Your function was created
 successfully!
 Use your function in Excel as follows:
 =ADD_NUMBERS(first_num, second_num)
 Next, you will be taken to the code editor
 where you can edit the code further and test
 the function.
   Continue
hello
```

### Functions tab



#### **OneDrive Functions**

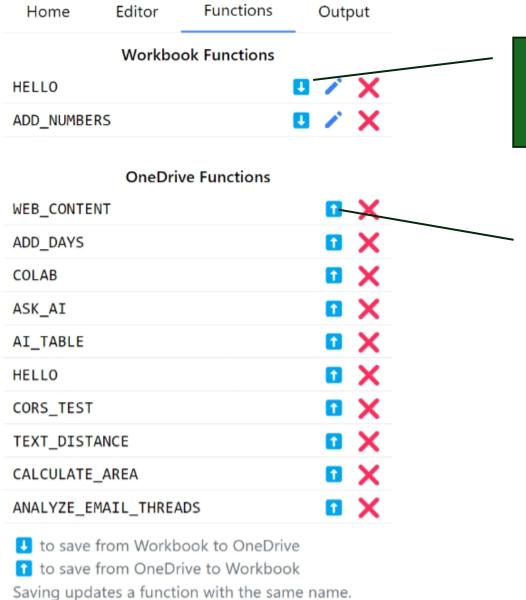
Login to OneDrive to save functions to OneDrive and use them with other workbooks.

Login to OneDrive

Login to OneDrive to save functions for use in other workbooks.

### OneDrive

- Functions can only be edited in the workbook.
- Saving a function to either location will overwrite a function of the same name if it exists.
- Requires Files.ReadWrite permission to access your OneDrive.



Save Workbook function to OneDrive

Save OneDrive function to workbook.

### Output tab

Home Editor Functions Output

Displays STDOUT and STDERR messages. Clear removes all messages and Cancel stops the current operation.





Running 3 test cases for add\_numbers

Case 1: [1.0, 2.0] -> 3.0 Case 2: [3.5, 4.5] -> 8.0 Case 3: [-1.0, 1.0] -> 0.0 Shows results of running test cases and any other stderr or stdout messages