

CENG 113 – Programming Basics

Lab 2

Python in Visual Studio Code (VS Code)

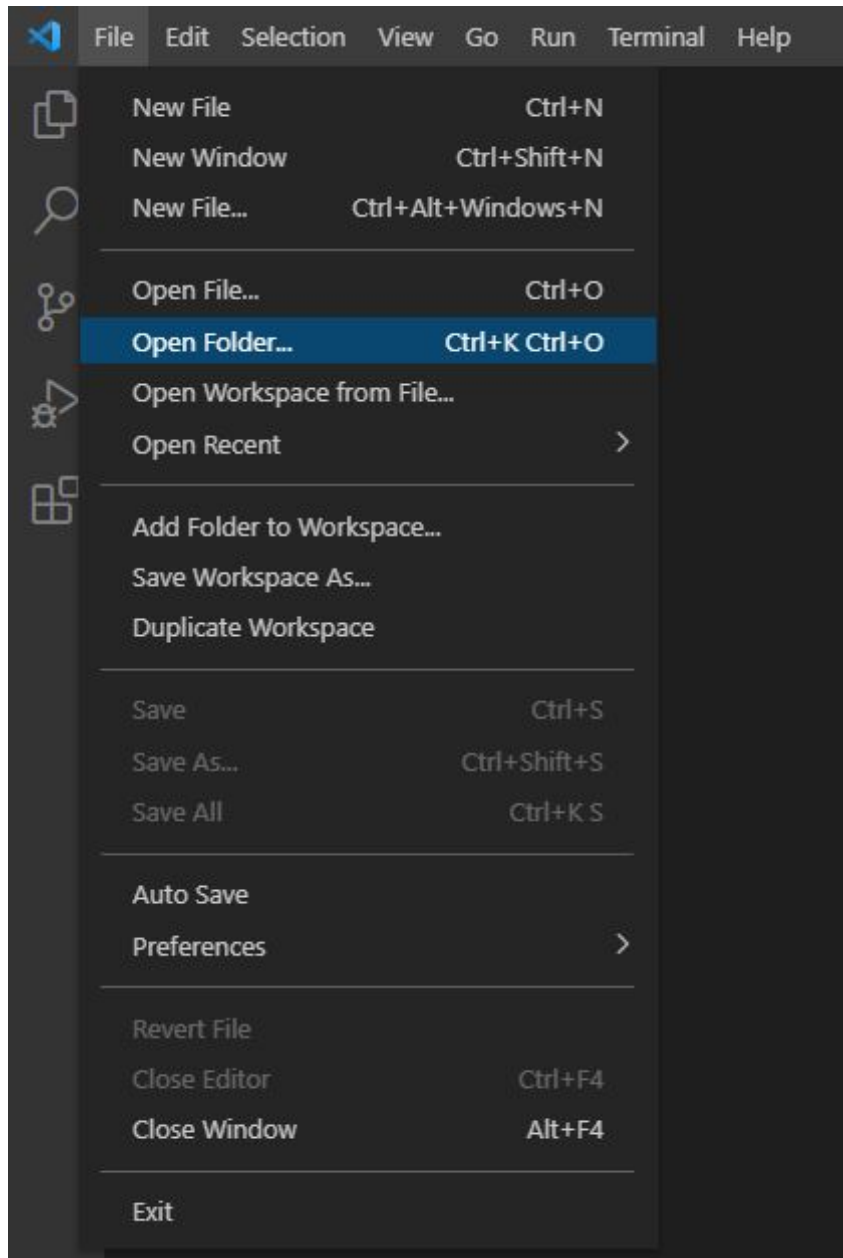
Prerequisites

- VS Code
- VS Code Python extension
- Python interpreter

Useful link:

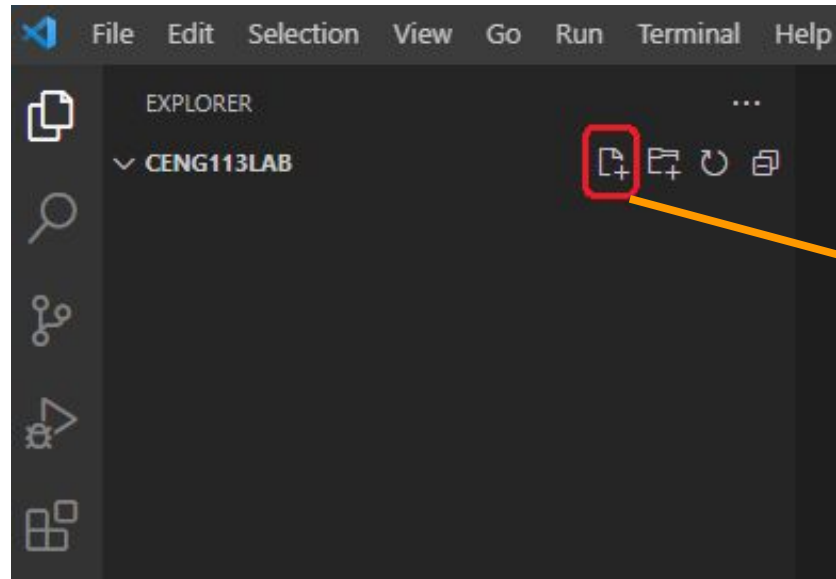
- <https://code.visualstudio.com/docs/python/python-tutorial>

Create a project folder

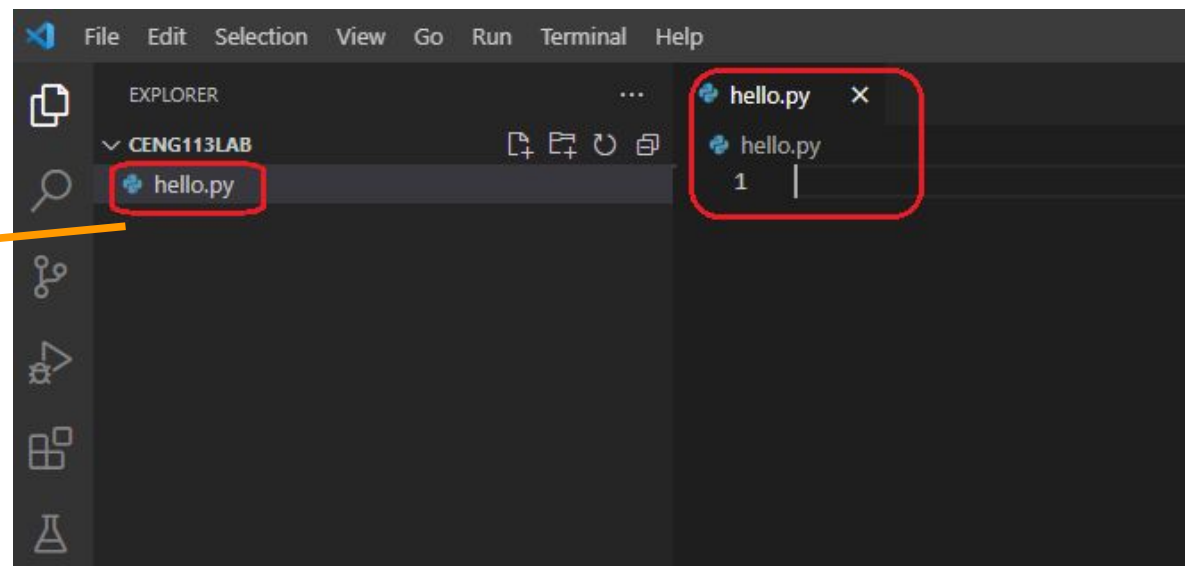


- File
- Open Folder
- Create a new folder named *CENG113Lab*, or open an existing folder

Create a Python file

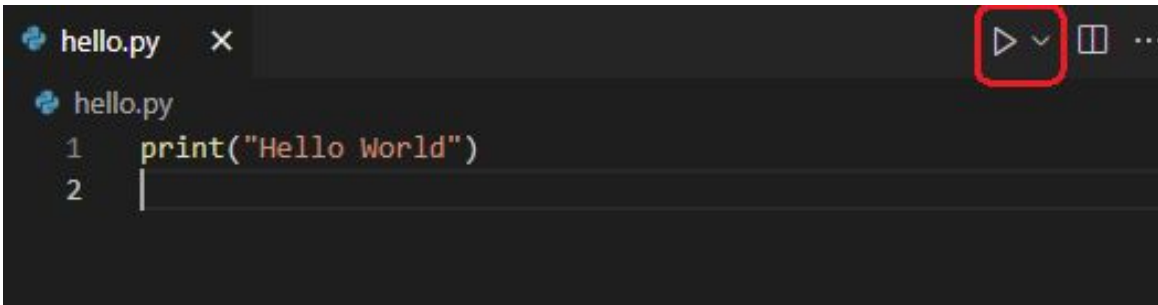


select New File



name the file
hello.py

Run a Python File



```
hello.py x
hello.py
1 print("Hello World")
2 |
```



```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

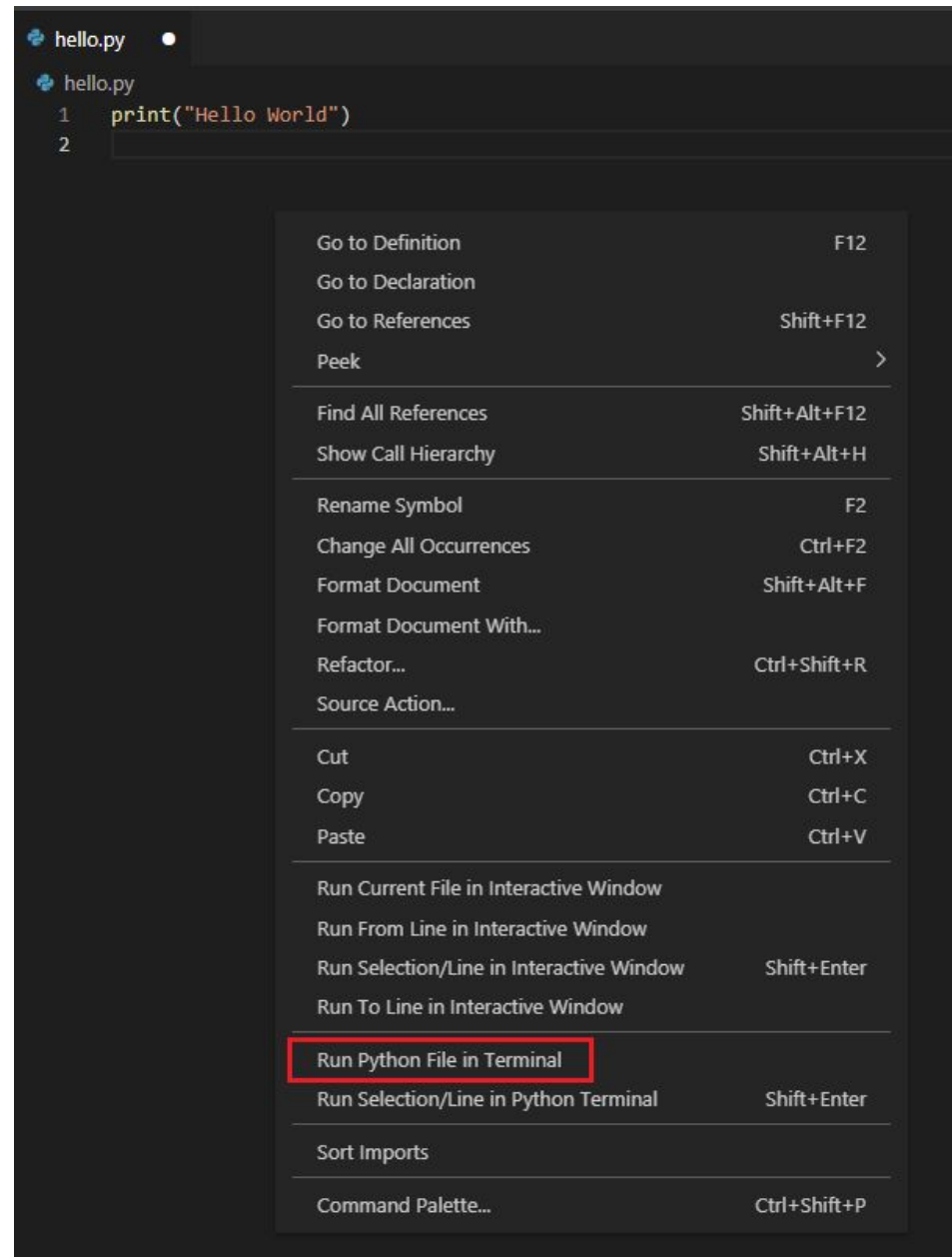
PS C:\CENG113Lab> & C:/Python/Python38/python.exe c:/CENG113Lab/hello.py
Hello World
PS C:\CENG113Lab> |
```

Output

Run a Python File

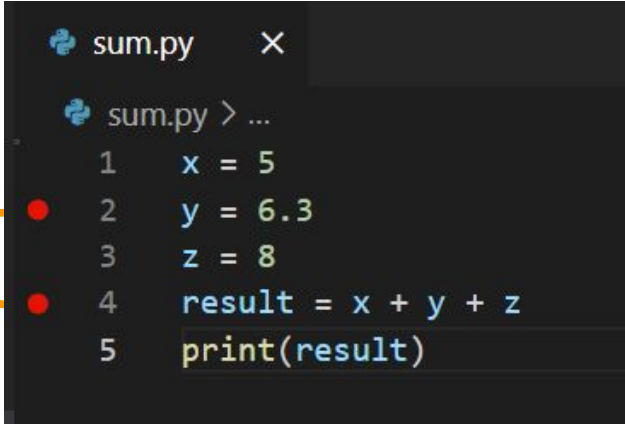
Another way to run a Python file:

- click right
- select



Debugging

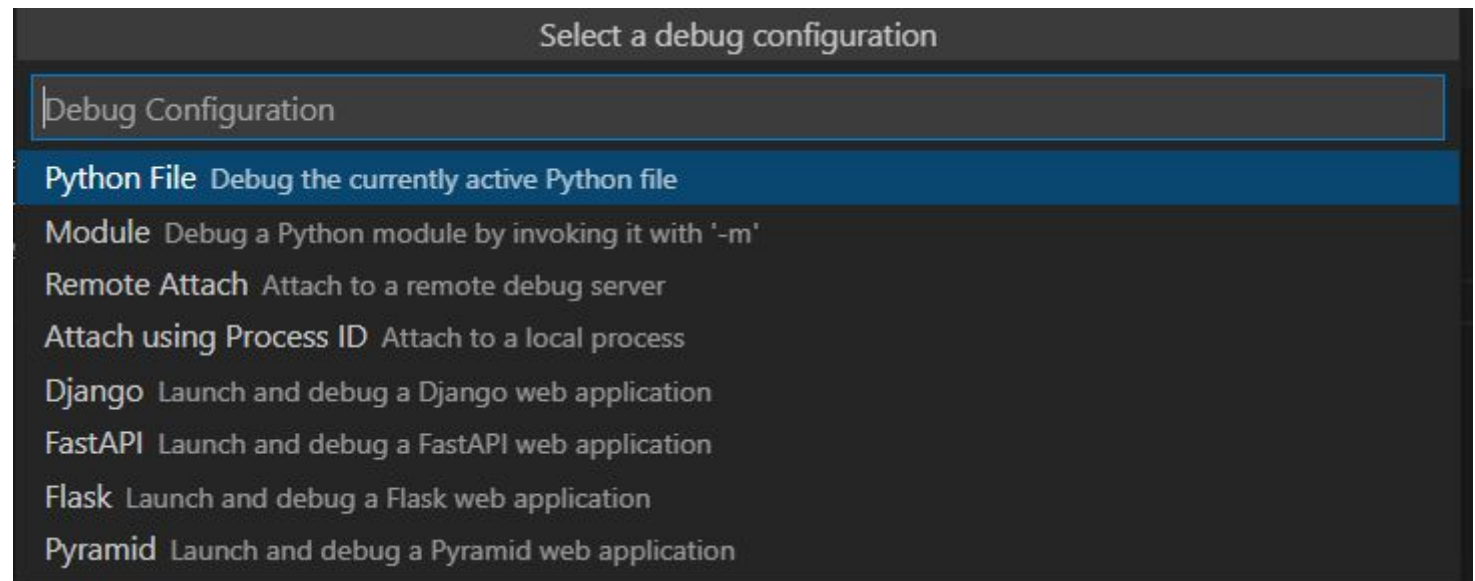
First, set
breakpoints
by clicking



```
sum.py  X
sum.py > ...
1  x = 5
2  y = 6.3
3  z = 8
4  result = x + y + z
5  print(result)
```

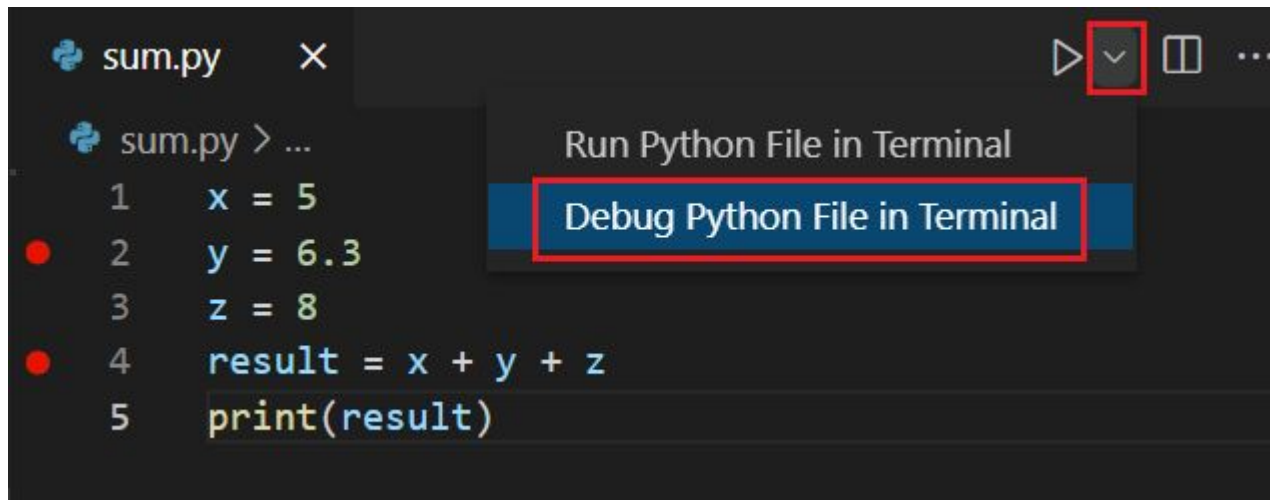
- Then, to initialize the debugger, press **F5**

For the first
time
debugging,
select
“Python file”

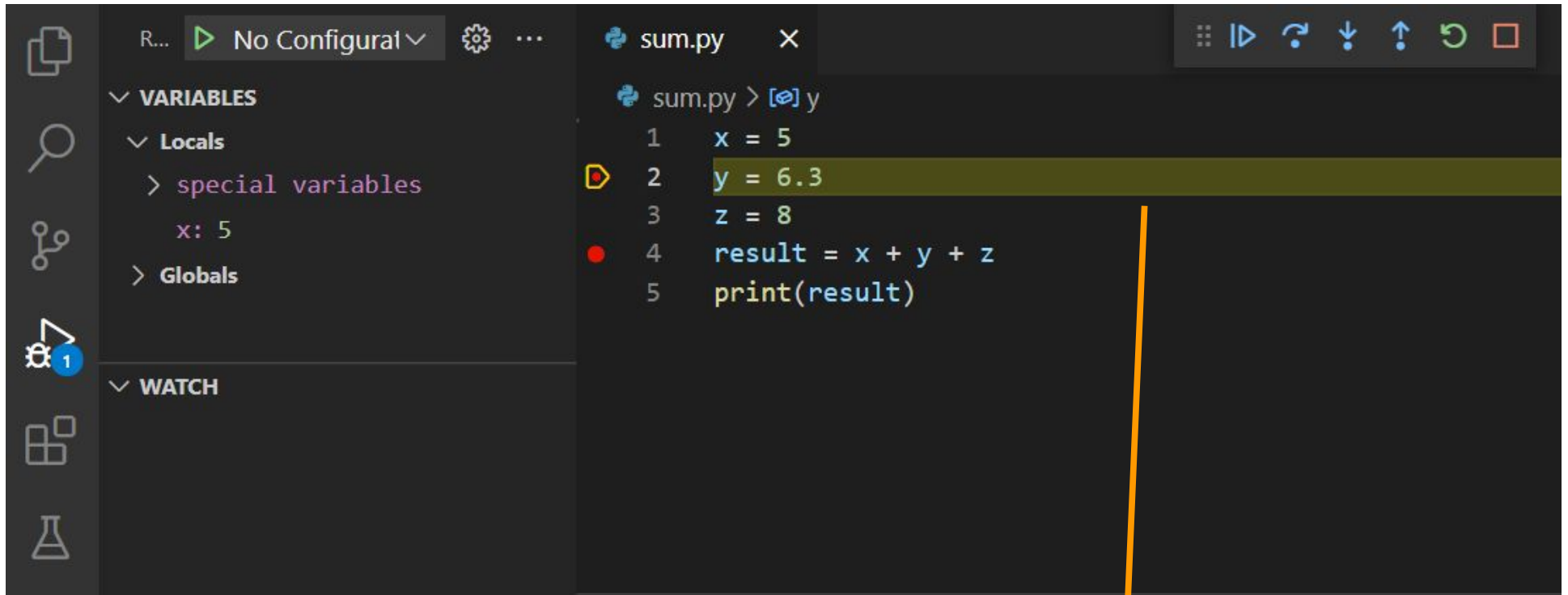


Debugging

- The second way to start the debugger:

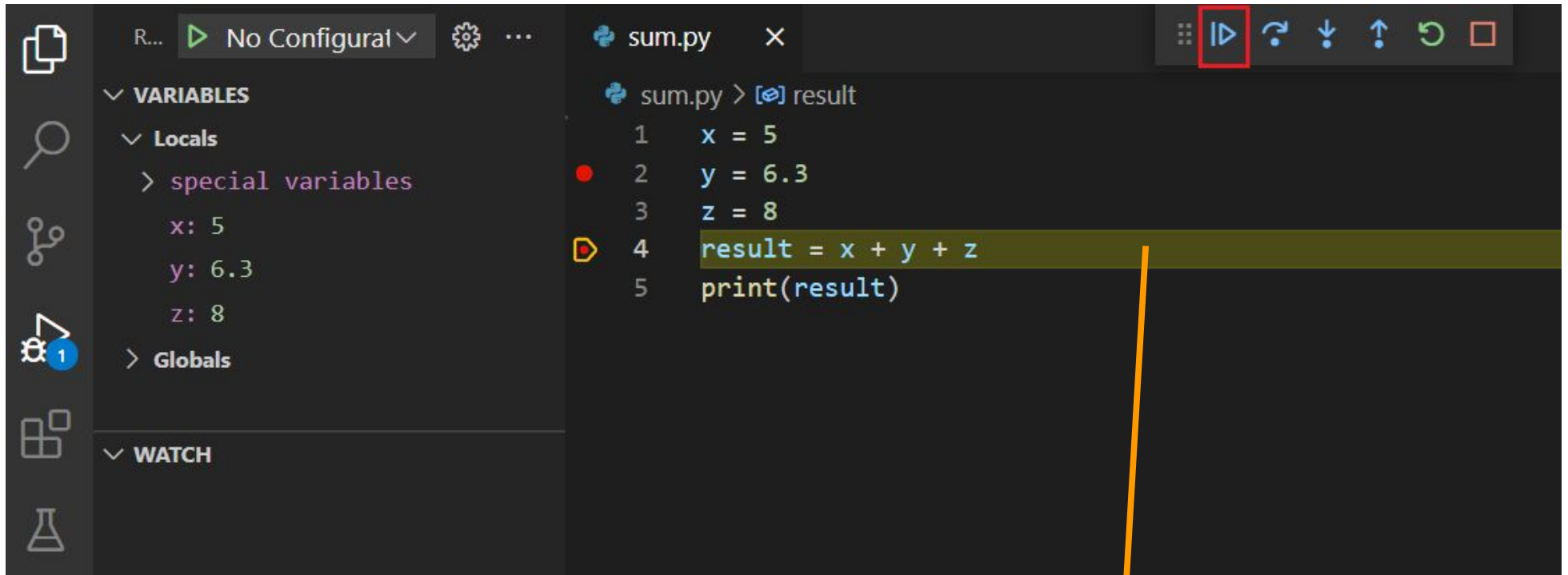


Debugging



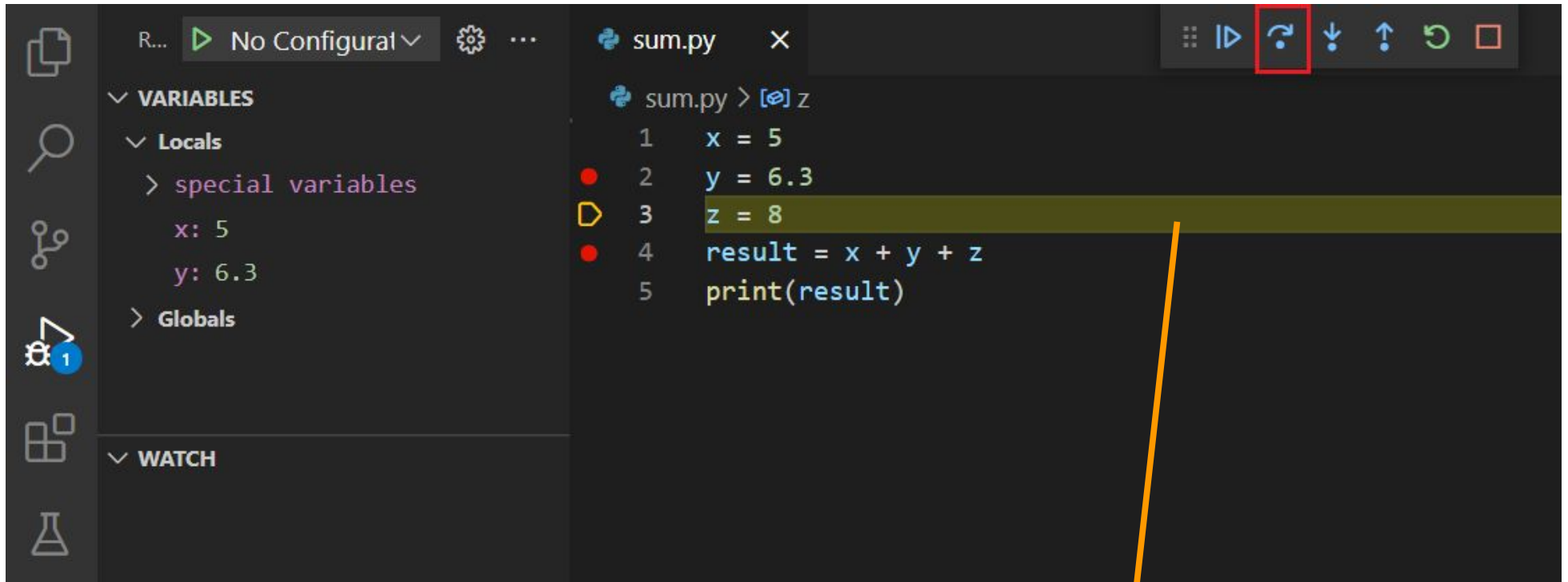
stops at the first
breakpoint

Debugging



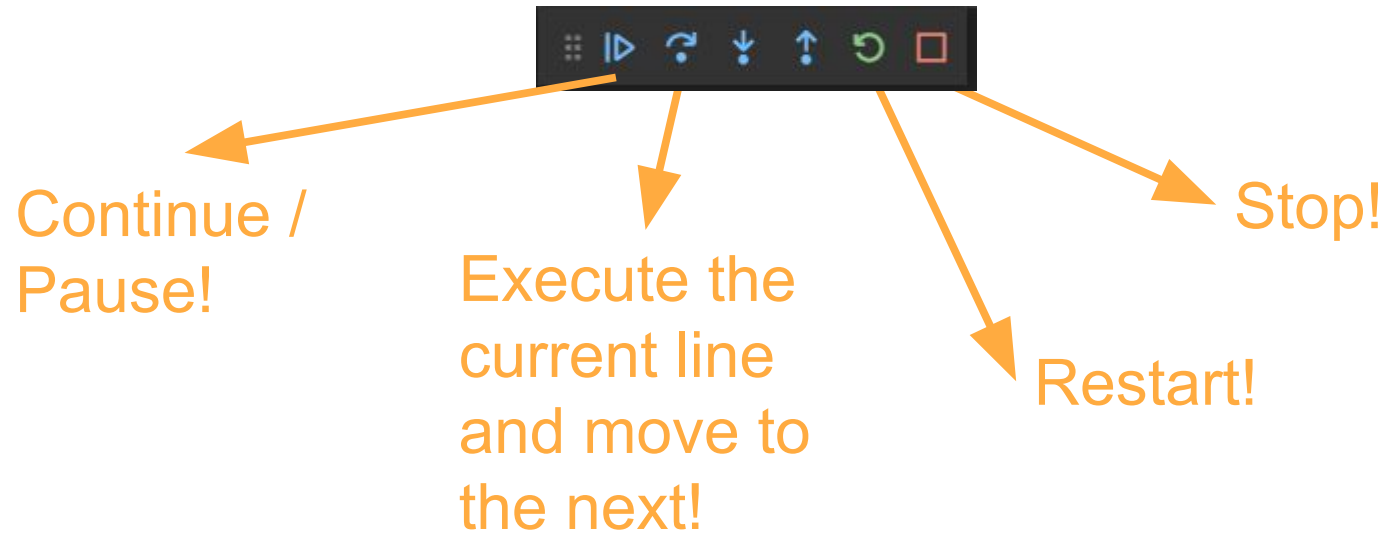
stops at the next
breakpoint

Debugging



moves to the next line

Debugging



Example: Area of a Circle

- Create a Python file named **circle_area.py**

```
radius = 10  
area = radius * radius * 3.14  
print(area)
```