

\*\*\*\*\*Default\*\*\*\*\*

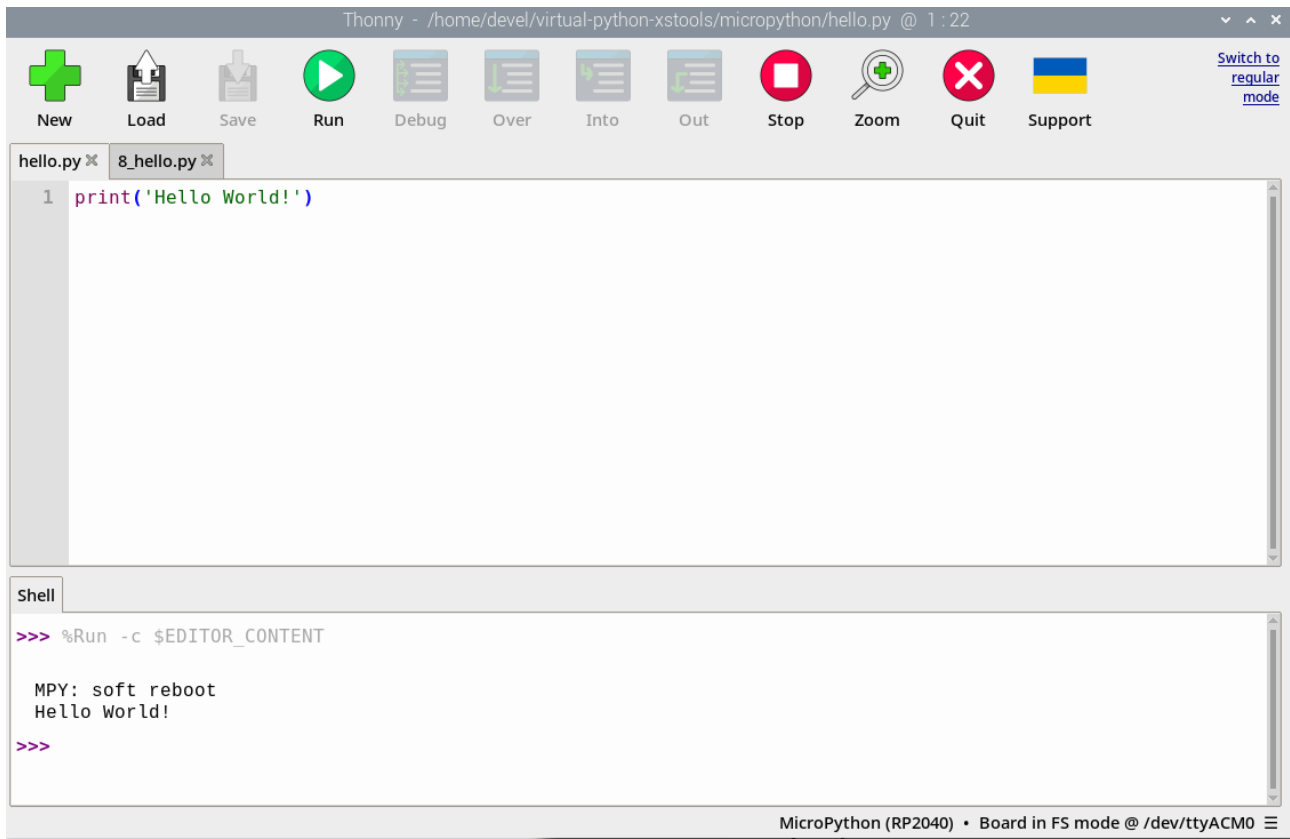
## MicroPython Pico

11/07/24

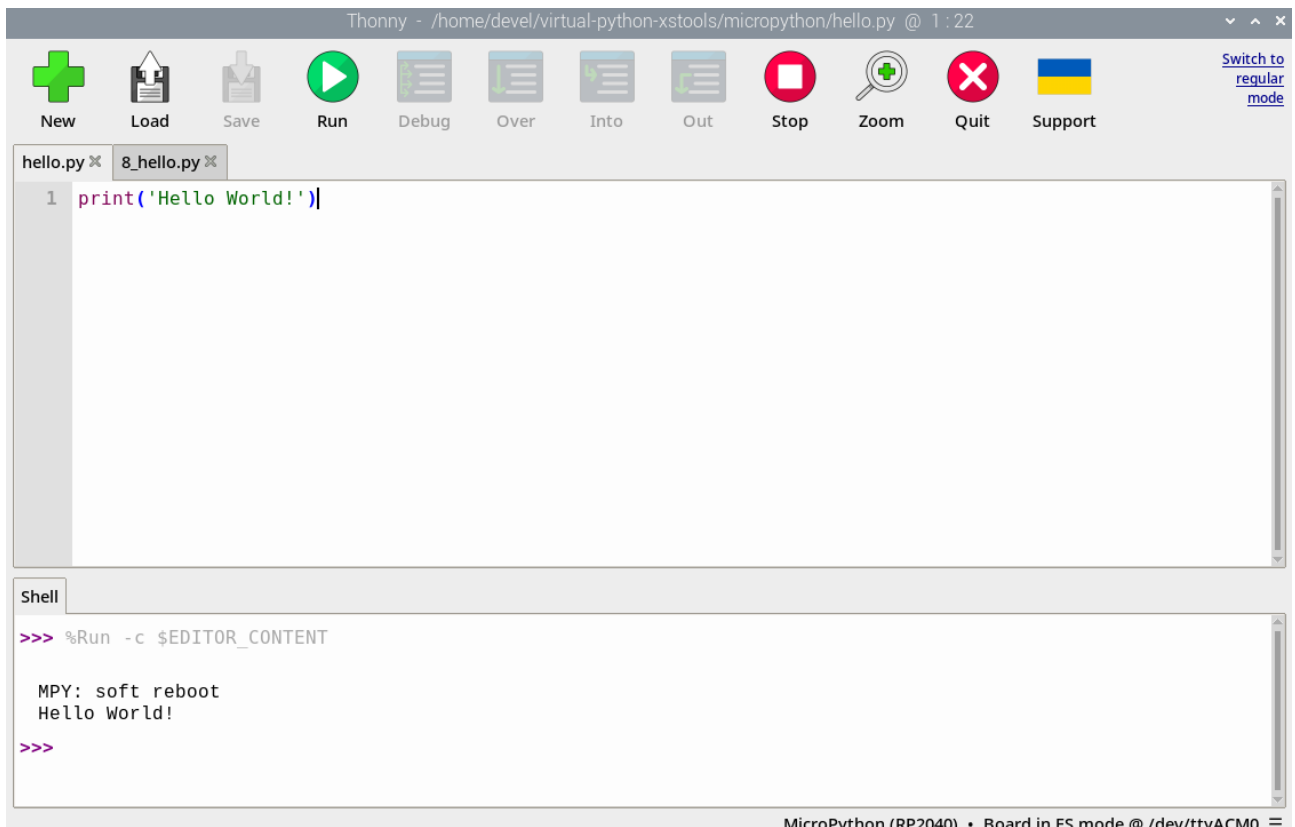
\*\*\*\*\*Default\*\*\*\*\*

Copied “RPI\_PICO-20241025-v1.24.0.uf2” to Raspberry Pico.

Created first MicroPython program hello.py



Running MicroPython program hello.py



The screenshot shows the Thonny IDE interface. The title bar reads "Thonny - /home/devel/virtual-python-xstools/micropython/hello.py @ 1:22". The toolbar includes icons for New, Load, Save, Run, Debug, Over, Into, Out, Stop, Zoom, Quit, and Support. The file explorer shows "hello.py" and "8\_hello.py". The editor window displays the code: `1 print('Hello World!')`. The Shell window shows the command `>>> %Run -c $EDITOR_CONTENT` and the output: `MPY: soft reboot` and `Hello World!`. The status bar at the bottom indicates "MicroPython (RP2040) • Board in FS mode @ /dev/ttyACM0".

```
Thonny - /home/devel/virtual-python-xstools/micropython/hello.py @ 1:22
```

New Load Save Run Debug Over Into Out Stop Zoom Quit Support

hello.py 8\_hello.py

```
1 print('Hello World!')
```

Shell

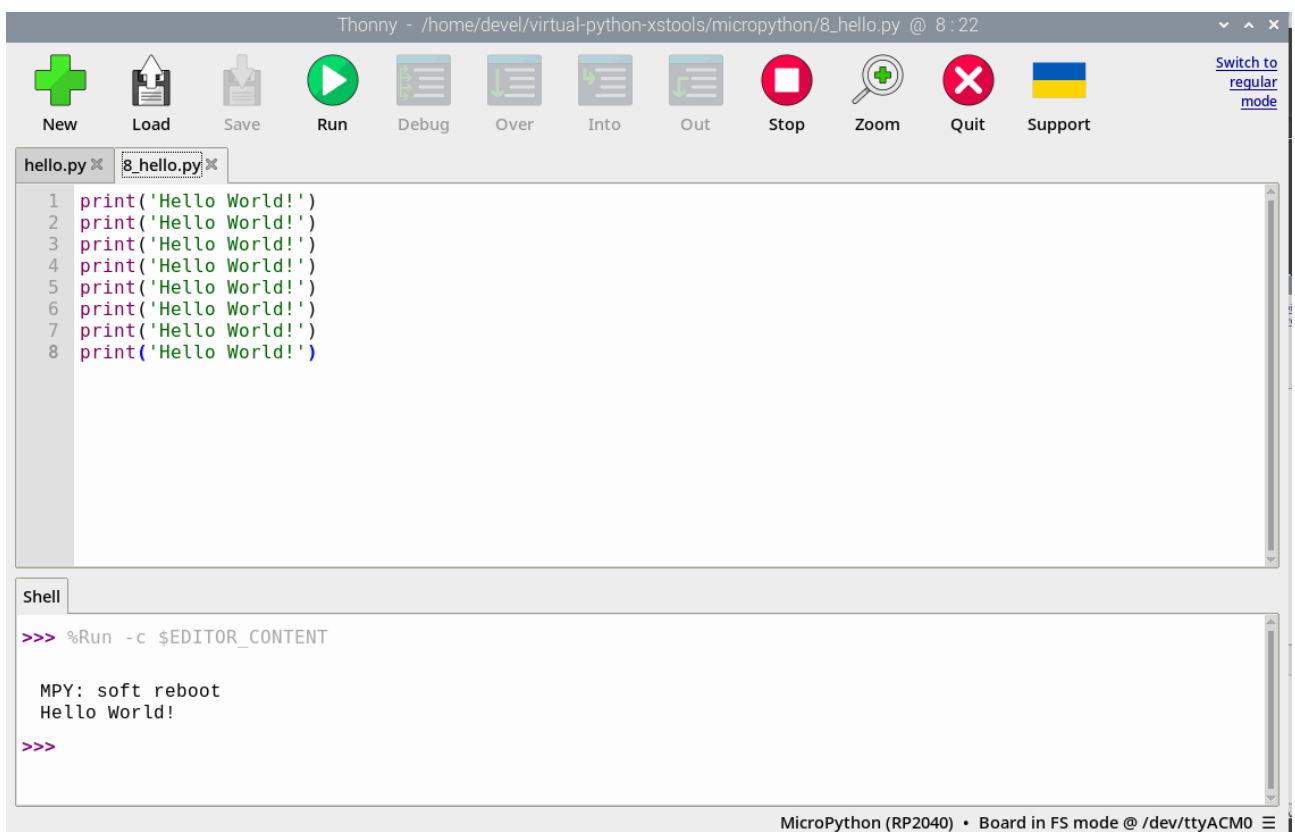
```
>>> %Run -c $EDITOR_CONTENT
```

```
MPY: soft reboot
Hello World!
```

```
>>>
```

MicroPython (RP2040) • Board in FS mode @ /dev/ttyACM0

Modified MicroPython program hello.py 8\_hello.py.



The screenshot shows the Thonny IDE interface. The title bar reads "Thonny - /home/devel/virtual-python-xstools/micropython/8\_hello.py @ 8:22". The toolbar is the same as the previous screenshot. The file explorer shows "hello.py" and "8\_hello.py". The editor window displays the code: `1 print('Hello World!')`, `2 print('Hello World!')`, `3 print('Hello World!')`, `4 print('Hello World!')`, `5 print('Hello World!')`, `6 print('Hello World!')`, `7 print('Hello World!')`, and `8 print('Hello World!')`. The Shell window shows the command `>>> %Run -c $EDITOR_CONTENT` and the output: `MPY: soft reboot` and `Hello World!`. The status bar at the bottom indicates "MicroPython (RP2040) • Board in FS mode @ /dev/ttyACM0".

```
Thonny - /home/devel/virtual-python-xstools/micropython/8_hello.py @ 8:22
```

New Load Save Run Debug Over Into Out Stop Zoom Quit Support

hello.py 8\_hello.py

```
1 print('Hello World!')
2 print('Hello World!')
3 print('Hello World!')
4 print('Hello World!')
5 print('Hello World!')
6 print('Hello World!')
7 print('Hello World!')
8 print('Hello World!')
```

Shell

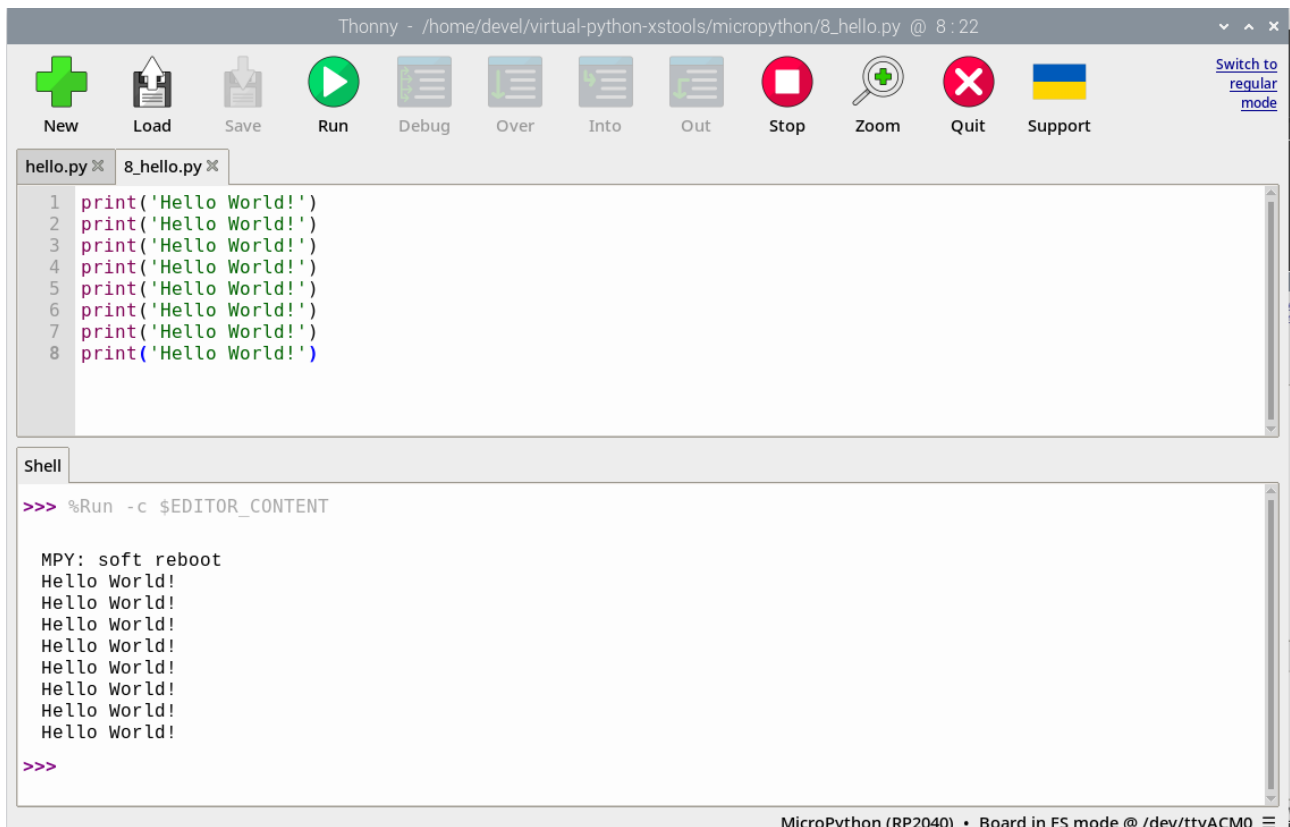
```
>>> %Run -c $EDITOR_CONTENT
```

```
MPY: soft reboot
Hello World!
```

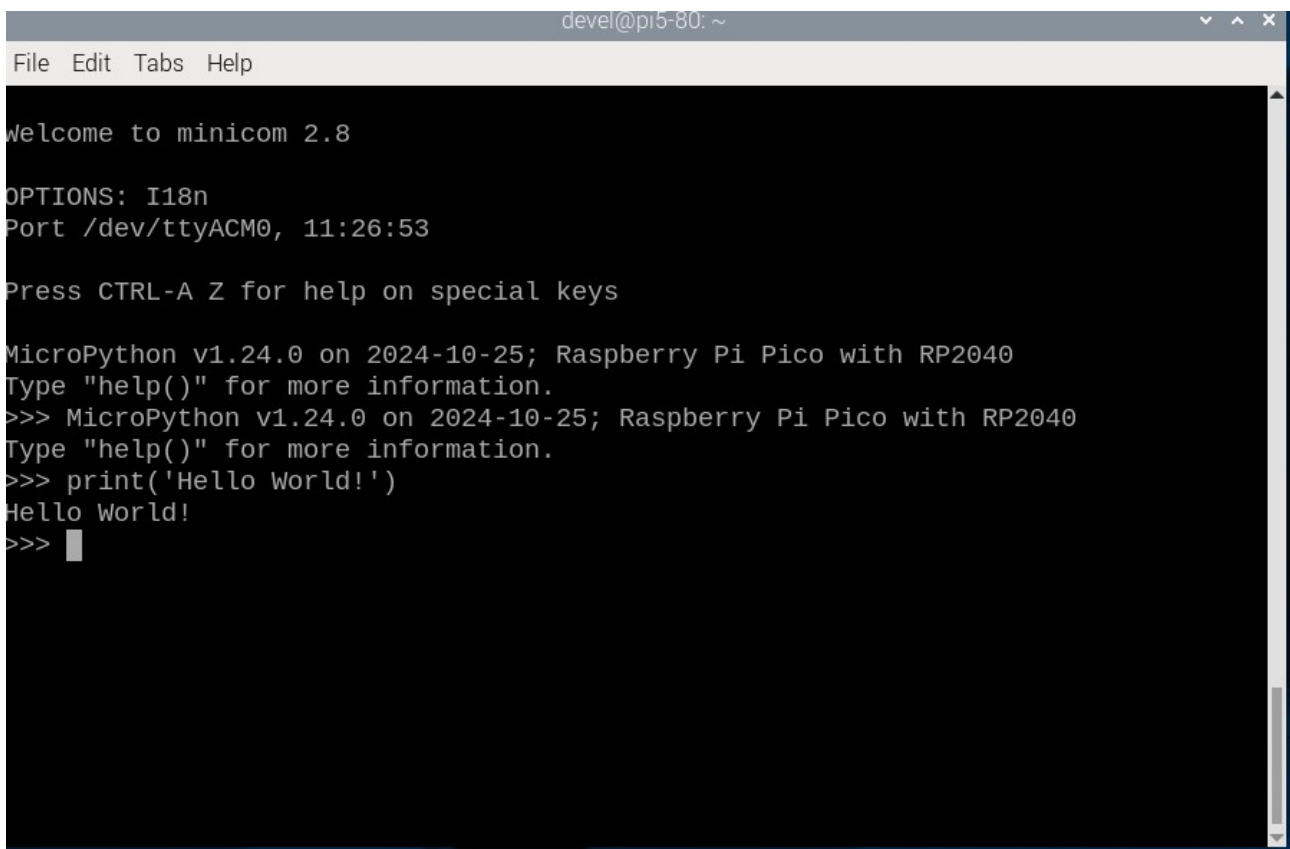
```
>>>
```

MicroPython (RP2040) • Board in FS mode @ /dev/ttyACM0

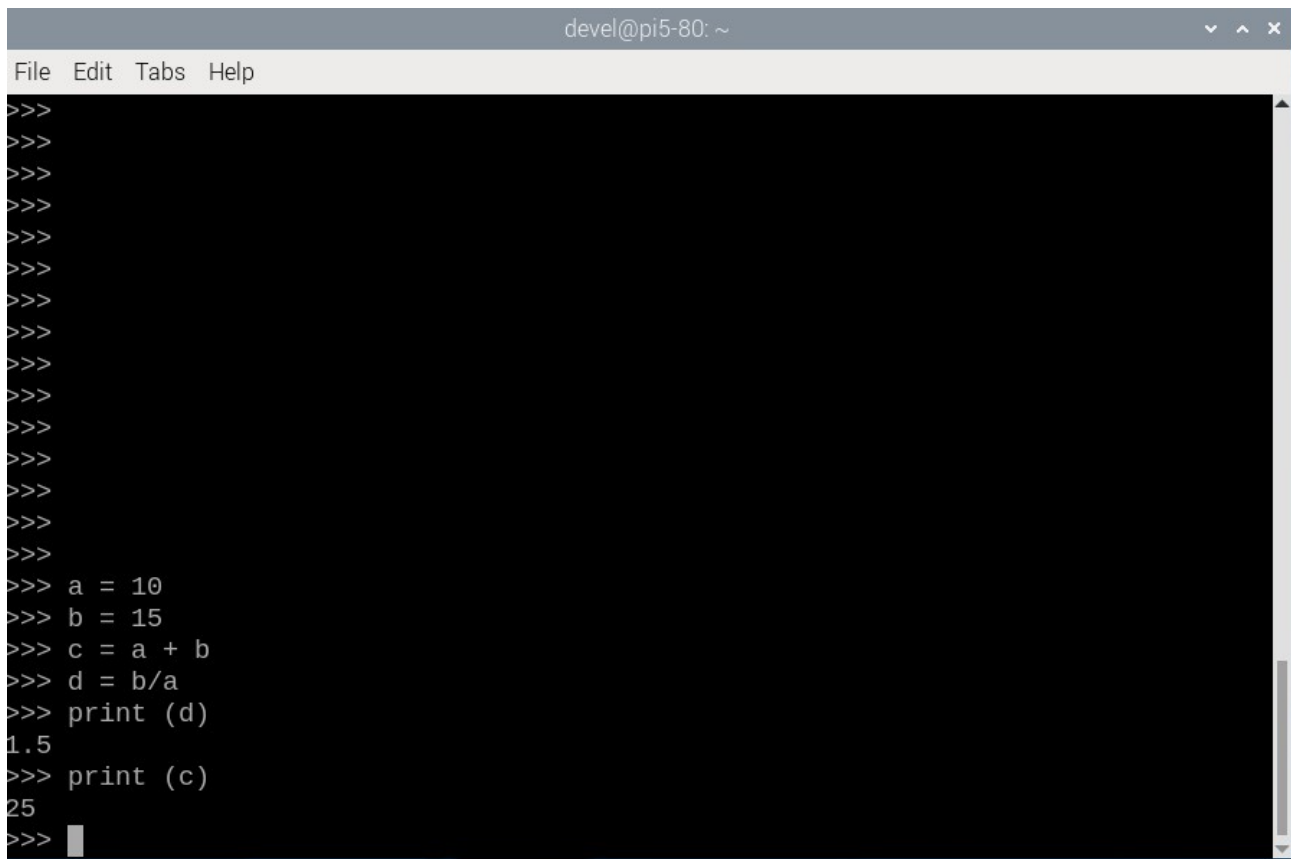
Running MicroPython 8\_hello.py



Up to now no imports required.



Testing using minicom



The image shows a screenshot of a MicroPython REPL window. The window has a title bar that reads "devel@pi5-80: ~" and a menu bar with "File", "Edit", "Tabs", and "Help". The main area is a black terminal with white text. The text shows a series of prompt characters ">>>" followed by several blank lines, then the assignment of variables 'a' and 'b', the calculation of 'c' as the sum of 'a' and 'b', and 'd' as the division of 'b' by 'a'. The output of 'print(d)' is '1.5' and the output of 'print(c)' is '25'. The cursor is on the line following the last prompt.

```
>>>
>>>
>>>
>>>
>>>
>>>
>>>
>>>
>>>
>>>
>>>
>>>
>>>
>>>
>>> a = 10
>>> b = 15
>>> c = a + b
>>> d = b/a
>>> print (d)
1.5
>>> print (c)
25
>>> 
```

MicroPython variables and simple math.