## **5** Call custom py library

5 Call custom py library

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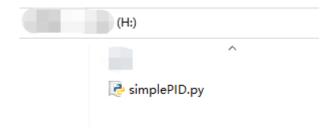
## 5.1 Custom py library description

For those of you who have used Python, Python allows you to call custom py libraries (or third-party py libraries) from the same directory, and MicroPython allows you to call custom py libraries as well. Before calling the custom py library, you need to import the py library file into K210.

## 5.2 Import the py library

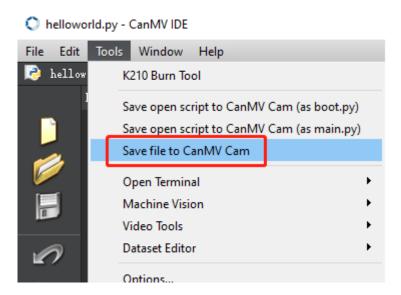
For example, consider importing simplePID.py.

There are two ways to import the custom py library. The first way is to copy the custom py library file directly to the root directory of the memory card, and then insert the memory card to call it.



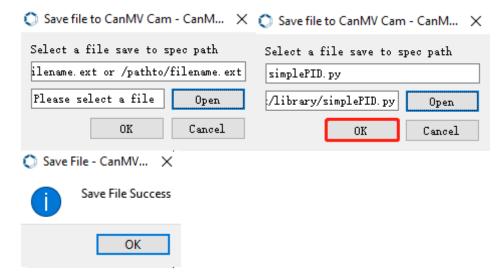
The second is through the CanMV IDE to import, the details of the operation please see the following content.

Go to Tools -> Save file to CanMV Cam.



Click Open, select the py file you want to pass in, change the filename to simplePID.py, and click OK to start writing to the file.

Note: The files written here are first written to the memory card.



## 5.3 Calling the py library

```
from simplePID import PID
print("import simplePID OK")
PID_controller = PID(0, 10, 0, 1)
print("PID test OK")
```

Run the above code, if normal, it will print the test OK message in the serial terminal at the bottom of the IDE.

```
>>> free 0 kpu model buffer
>>>
>>> free 0 kpu model buffer
>>> import simplePID OK
PID test OK
MicroPython v2.0.5 on 2023-02-23; CanMV_Yahboom with kendryte-k210
Type "help()" for more information.
>>>
```

You'll get an error if you didn't import simplePID.py earlier or if the names don't match.