## 7.5、Call custom py library

7.5, Call custom py library

7.5.1, Custom py library description

7.5.2、Import the py library file

7.5.3、Call the py library

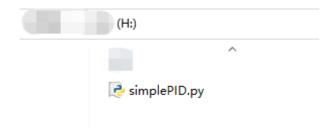
## 7.5.1, Custom py library description

Friends who have used Python should know that Python supports calling custom py libraries (or third-party py libraries) in the same directory, and MicroPython also supports calling custom py libraries. Before calling the custom py library, the py library file needs to be imported into K210 in advance.

## 7.5.2、Import the py library file

Here is an example of importing simplePID.py.

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



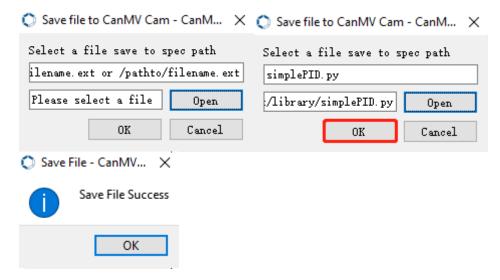
The second is to import through CanMV IDE, please refer to the following content for specific operations.

Open Tools -> Save File to CanMV Cam.



Click Open, then select the py library file to be imported, change the file name to simplePID.py, then click OK to start writing the file, and wait for the file to be written.

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



## 7.5.3, Call 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 it is normal, the test OK prompt message will be printed on the serial terminal at the bottom of the IDE.

```
#行终端 | 島 同

>>> 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.

>>>
```

If the simplePID.py file is not imported in advance, or the imported name does not correspond, an error will be prompted.