Python usage

Python is an interpreted, object-oriented, high-level programming language with dynamic data types.

```
The Python3 environment is pre-installed on the Raspberry Pi, so I won't
introduce how to install it here!
```

1. Interactive mode

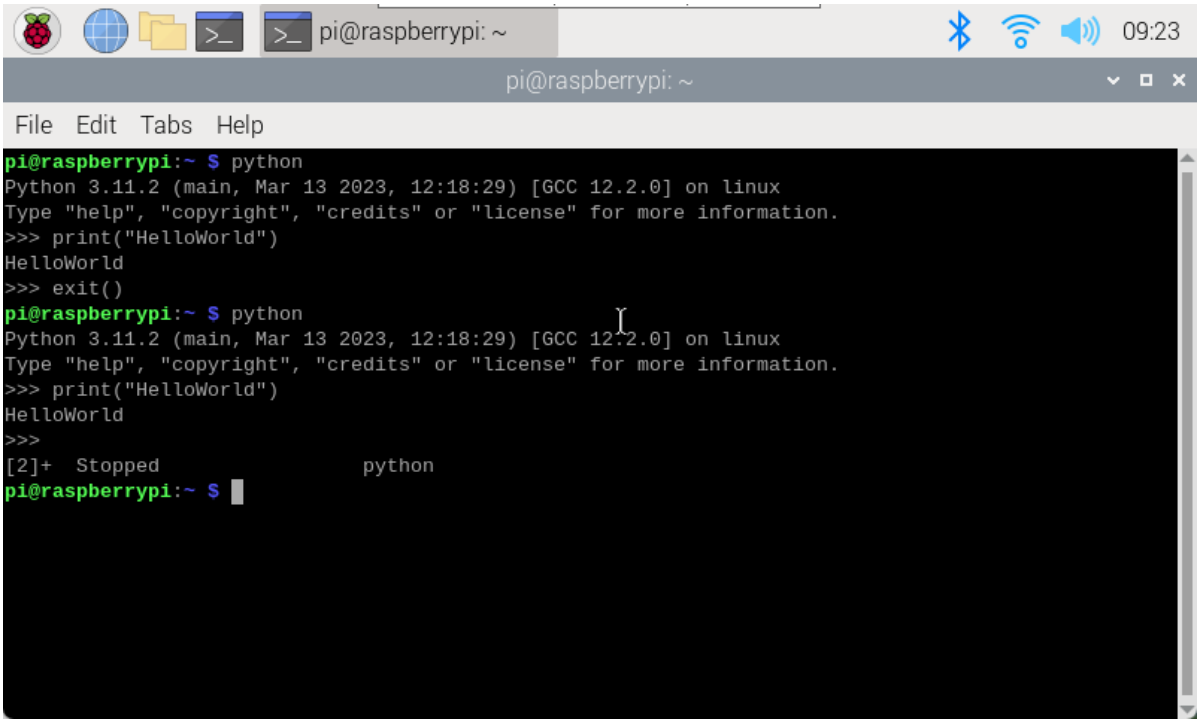
In Python, Python code entered in interactive mode is executed immediately and the results are output.

```
Good for quickly trying out and testing code
```

Enter the python command on the command line or terminal to enter interactive mode:

```
python
```

Press Ctrl+Z or enter exit() to exit this mode!



2. Script mode

By writing a Python script file (with the .py suffix), you can save multiple lines of code in the file, and then execute these codes through tools such as the command line or an integrated development environment (IDE).

- Create new folders and files

```
mkdir Demo_Python
cd Demo_Python/
nanoHelloWorld.py
```

-Write source code

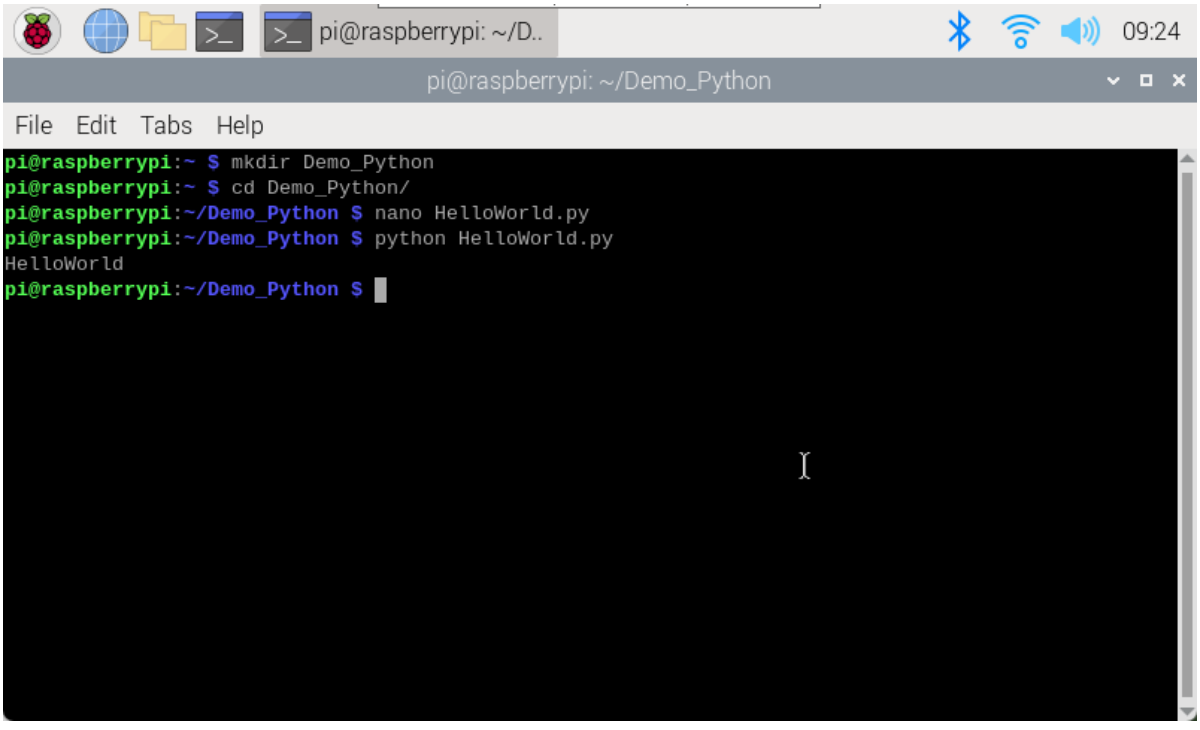
```
# This is the first program

print("HelloWorld")
```

Hold down Ctrl+X, enter Y, then press Enter to save and exit!

- Run the .py file

Enter python <file_name> in the terminal

```
pythonHelloWorld.py
```



3. Jupyter lab

Jupyter Lab is a web-based interactive development environment that supports multiple programming languages.

The content of Jupyter Lab is introduced later. Here we only demonstrate a simple routine. For detailed introduction, you can jump to the [Jupyter Lab Programming] tutorial.