

PYTHON File Other Extensions:

- .py ==> Python File (Regular Scripts)
- .py3 ==> (rarely used) Python3 script
- .pyc==> This is the compiled bytecode/compiled scripts (Bytecode)
- .pyd ==> This is basically a windows dll file
- .pyo ==> This is optimized pyc file
- .pyw==Python script for Windows
- .pyz ==> Python script archive (Compressed or Zip formated)

SETTING PYTHON PATH IN Windows:

Right click on My Computer ==>Properties ==> Advanced System Settings ==>Environment Variable ==>NewIn Variable name write path and in Variable value.

```
>>> import os  
>>> os.getcwd()
```

Displays PYTHON Installed Path, copy path without quotes ==> Click Ok ==>Ok.

Clear screen in Windows:

There is no python builtin command for IDLE to clear the screen in Windows platform. We can perform through customized or userdefined commands..!!

```
>>> print("\n"*20)#displaying blank lines  
>>> clear="\n"*20#Assign blank lines  
>>> print(clear)#displaying blank lines
```

INSIDE PYTHON

After successful installation of Python, It is the combination of Interpreter and Support Library.

Programmers View of Interpreter

Interpreter is a software, which takes source code, reads it line by line and executes it line by line to produce the output.

Inside INTERPRETER

In Compiled languages are, compiler converts the source code into machine code or binary code, which is directly executed by the machine. In PYTHON compiler is using to convert the source code(.py) into byte code.(.pyc)

What is Byte Code in PYTHON?

Byte code is easily readable by PYTHON Virtual Machine and Source code easily understandable by programmers.

- 1 Low Level
- 2 Platform Independent
- 3 Efficient
- 4 Intermediate
- 5 Representation of your source code

PVM is read the byte code line by line and execute every line and produce output. In that process PVM uses all your Library Modules.

What are PYC files?

Python automatically compiles your script to compiled code, so called

byte code, before running it.

pycache:

It is a folder containing Python-3 byte-code compiled and ready to be executed.

Example:

```
import py_compile  
print(dir(py_compile))
```

Example:

```
import compileall  
print(dir(compileall))
```

Example:

```
import py_compile  
py_compile.compile("MyScript.py")
```

Steps to Work with PYTHON INSIDE:

1. Create a Folder/Directory on the Desktop (or in AnyLocation)
2. Create a py file in that folder
3. Go to command prompt, change to current Folder/Dir location
4. python and hit the return key
5. import py_compile
6. py_compile.compile("filename.py")
7. pycache folder created automatically with byte code
8. cd pycache
9. python file.cpython-38.pyc, to execute byte code directly without source code