

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 formatted)

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