**1. Python's Platform Independence**

* Python is platform-independent at the **source code level**, meaning you can write Python code and run it on different platforms (Windows, Linux, macOS) without modification.
* However, the **compiled bytecode** (.pyc files) is **not necessarily cross-compatible between different Python implementations**.

**2. CPython vs. Jython**

* **CPython** (the default Python implementation) compiles Python code into **Python bytecode** that runs on the **CPython Virtual Machine**.
* **Jython** compiles Python code into **Java bytecode** that runs on the **Java Virtual Machine (JVM)**.

**3. Bytecode Incompatibility**

* The bytecode generated by **CPython (.pyc files)** is specific to CPython’s interpreter.
* Jython compiles Python code into Java bytecode (.class files) to be executed by the JVM.
* This means that a **.pyc file generated by CPython cannot be executed by Jython**.

**4. Recompilation is Needed**

* To run the same Python code on Jython, you must recompile the original **.py source file** using Jython.
* The same applies when moving from Jython to CPython.