Internal working of python
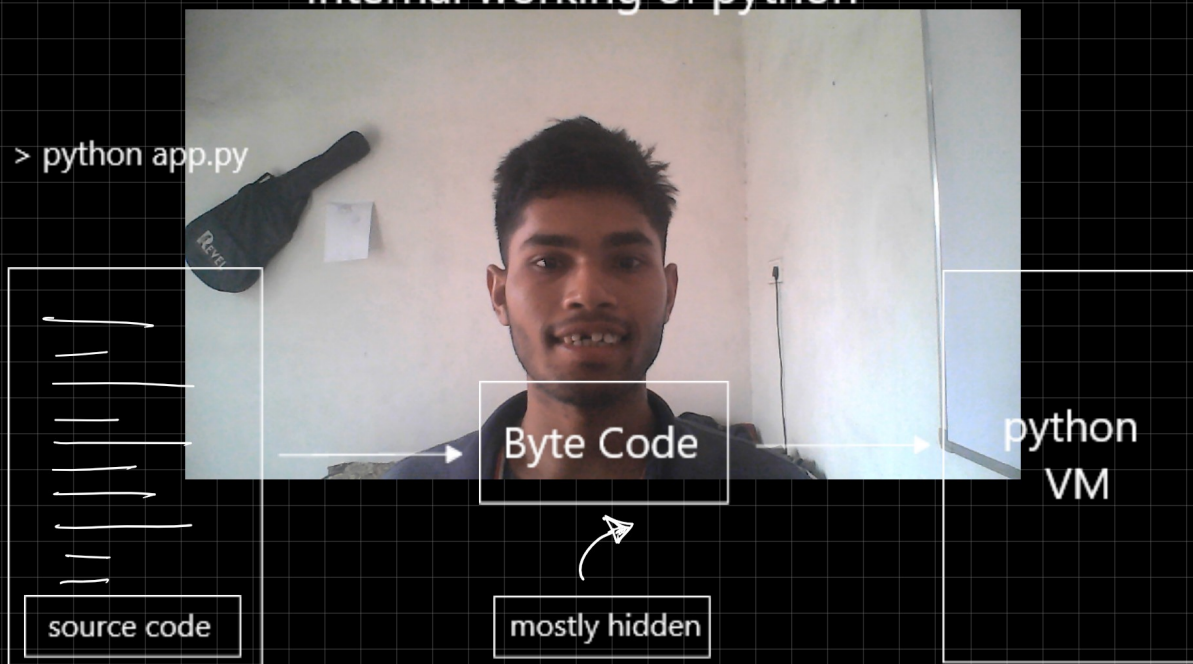
> python app.py

| source code | Byte Code → python VM |
| mostly hidden | |

1. Compile to Byte Code

→ Low level & Platform Independent

→ Byte code runs faster

• pyc → compiled python (Frozen Binaries)

__pycache__

Source Change & Python Version

hello_abhi.cpython-312.pyc

→ Works only for imported files.

→ Not for top level files.

2. Python Virtual Machine (PVM)

→ Code loops to iterate bytecode

→ Runtime engine

→ Also known as python iterpreter

→ Bytecode is not machine code.

→ Python specific interpretation

→ cpython, jython, IronPython, Stackless, PyPy

standard implementation

Mutable and Immutable in Python

Garbage Collector

memory

name → "Abhi"

name → "Ashish"

X → 4

Y → 4

→ 10

username → "Abhi"

"Abhy"