**CSC 423 ASSIGNMENT**

**NAME: OLANIRAN FAITH**

**MATRIC NO: 20CG028118**

**PROGRAM: COMPUTER SCIENCE**

Is python pure interpretation or hybrid implementation?

* Python is hybrid implementation.

Give a history in the light of the above.

* Python began its transition towards a hybrid implementation with the introduction of alternative implementations like PyPy in the mid-2000s, which brought Just-In-Time (JIT) compilation techniques to enhance performance.
* Python code is executed by the Python interpreter, which reads and interprets the code line by line. The interpreter converts the code into bytecode, it is then executed by the Python virtual machine.
* Bytecode is a low-level representation of Python code that is used for execution by the Python virtual machine. The virtual machine is a software program that runs on the computer and provides the environment for executing Python code.
* Just in time compilation converts bytecode into machine code at runtime. It also speeds up the execution of frequently used code.