🤪Interpreter V/S Compiler

Interpreter-

An interpreter is a language translator which convert H.L.L to machine code considering one statement at a time.

AS, it is a step-by-step procedure of translation & execution thus we require interpreter every time.

So, if we delete our interpreter s/w from device after 1st run then the same pgm will not run-in 2nd time

Partial execution will occur if error found.

Usually easy for programmers.

LANG: - Python, JavaScript

Compiler-

A compiler is a language translator which convert H.L.L to machine code entirely in one go.

It is only required one time to extract the compiled version of original source file.

So, even if delete the interpreter from device after 1st compilation then we can run the target file many times.

No execution will occur if any error is encountered.

Usually difficult for programmers.

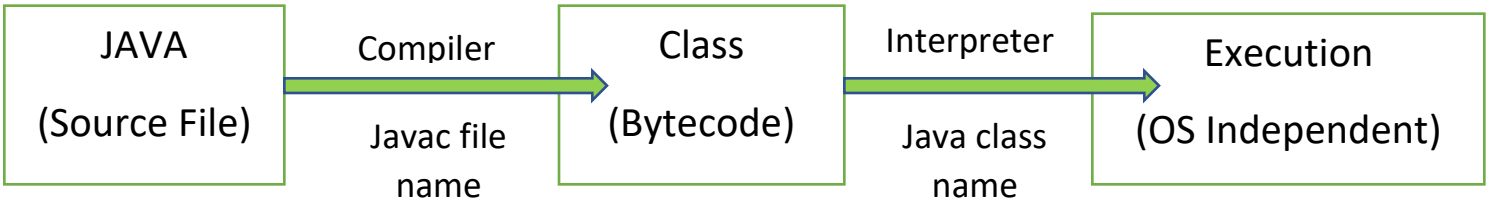
LANG: - C++, C, JAVA, Kotlin

😮 Is JAVA Compiled or Interpreted?

JAVA is a hybrid language i.e., both Interpreted as well as Compiled this is due to fact that java source file is compiled to **.class** file or(***bytecode***) but it is then interpreted by the **J.V.M.**

This *bytecode file thus generated is platform independent and can be run in any platform/environment.*

That's why JAVA is also called as ***"Write once run anywhere"***



We can also set the path of our bin folder of JDK so it global accessible as-

C:\Program Files\Java\jdk-17.0.2\bin → Environment Variable