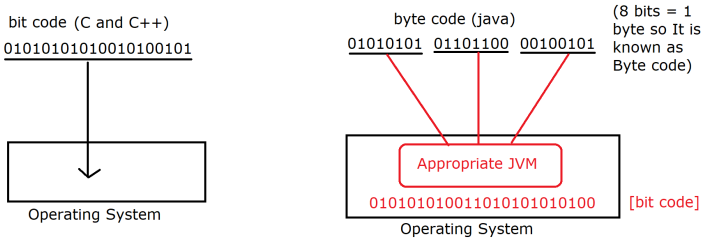
What is the difference between bit code and byte code ?

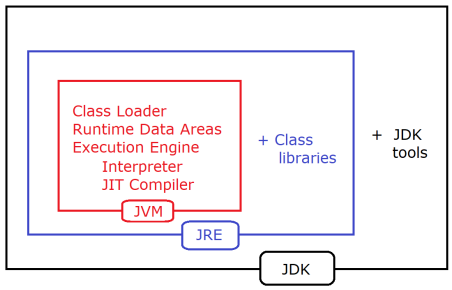
* bit code which is generated by C and C++ languages are directly understood by Opearting system, on the other hand the byte code which is generated by Java lanaguage is understood by JVM (but not understood by Operating system directly)



What is the difference between compiler (javac) and Interpreter (JVM) :

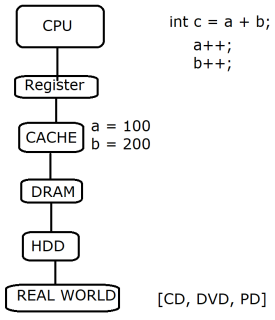
Compiler	JVM
1) Scans the entire program once.	1) Scans the program line by line.
2) It will display all the errors and warnings at a time.	2) It will display the runtime error one by one not at a time.
3) Debugging is difficult.	3) Debugging is easy.
4) It generates byte code after successful compilation so to hold the byte code, separate memory is reqd	4) It does not generate any other file, Actually It will execute the code line by line and concurrently It will generate the output so separate memory is not reqd
5) After successful compilation, we can delete the .java file.	5) We can't delete .class file due to line by line execution
6) After successful compilation, Execution is fast	6) Interpreter is slow in execution because if we make a mistake at line number 5 then after resolving the issue it will again execute from line number 1
7) C, C++, Java, C# and so on, these languages are using compiler	7) Java, JavaScript, Python, Visual basic these languages are using Interpreter.

** What is the difference between JDK, JRE, JVM and JIT compiler ?



JDK, JRE and JVM

What is JIT compiler :



JIT Compiler :

Native Code instruction + Repeated code instruction

JIT compiler will hold both the instruction and make it available directly at the time of Execution by interpreter so the overall performance of java will increase