Object Oriented Programming

WHAT IS JAVA ?

Java source code naming conventions

- All java source file should end with .java
- Each .java file can contain **only one public class**
- The **name of the file** should be **the name of the public class** plus ".java"
- Do not use abbreviations in the name of the class
- If the class name contains **multiple words**

  -- **capitalize the first letter of each word** ex. HelloWorld.java

Naming Convention

- *Class Naming*
  - *Uses Capitalized word(s) i.e. Title case*
  - Examples:- HelloWorld, MyList, StudentMark

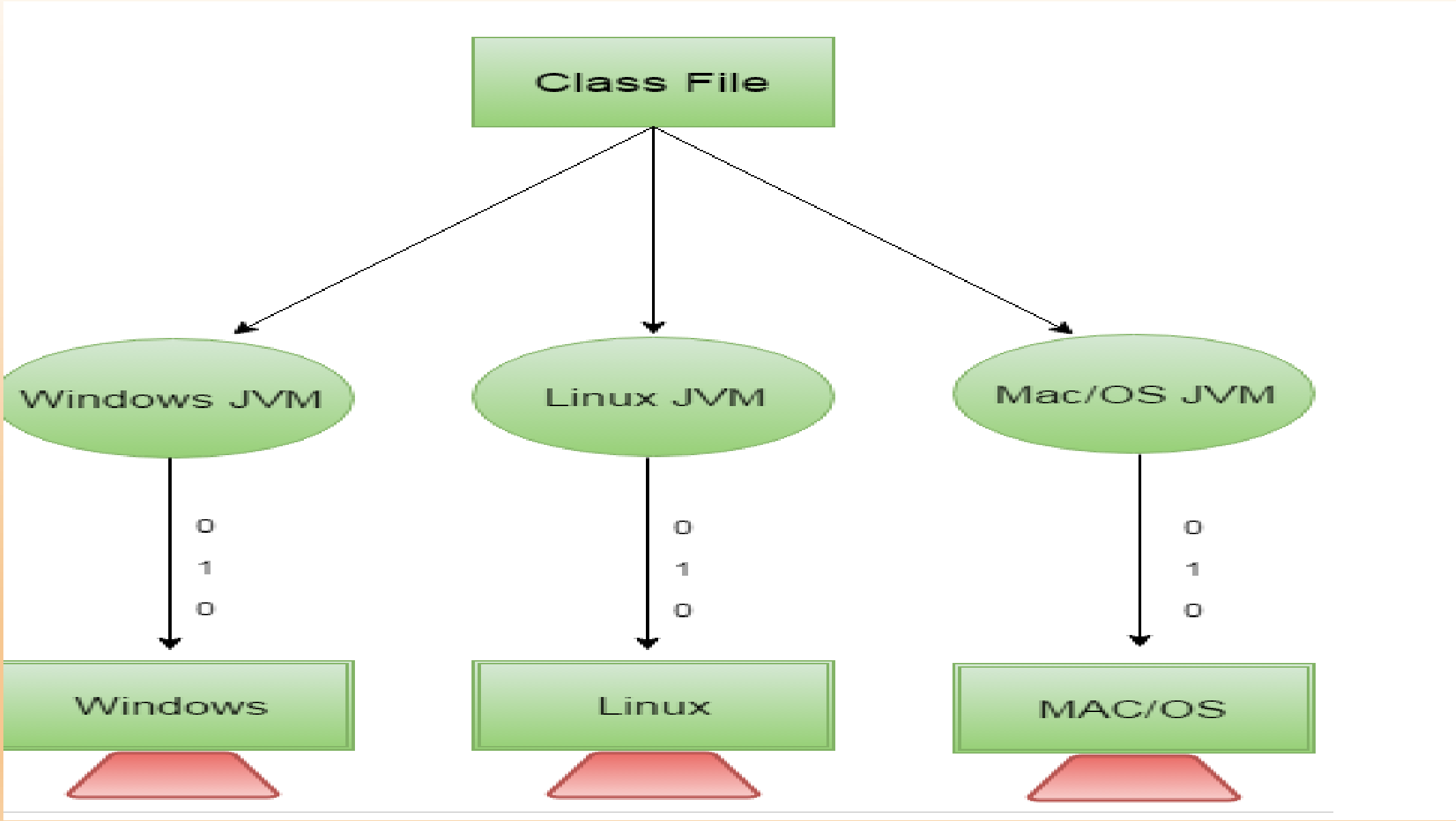
- *Variable and method names*
  - starts with a lowercase letter and after that use Title case
  - Examples:- variableAndMethodNames, aFloat, studentName

- *Names of constants*
  - All are capital letters and separated by underscore.
  - Example: NAMES_OF_CONSTANTS

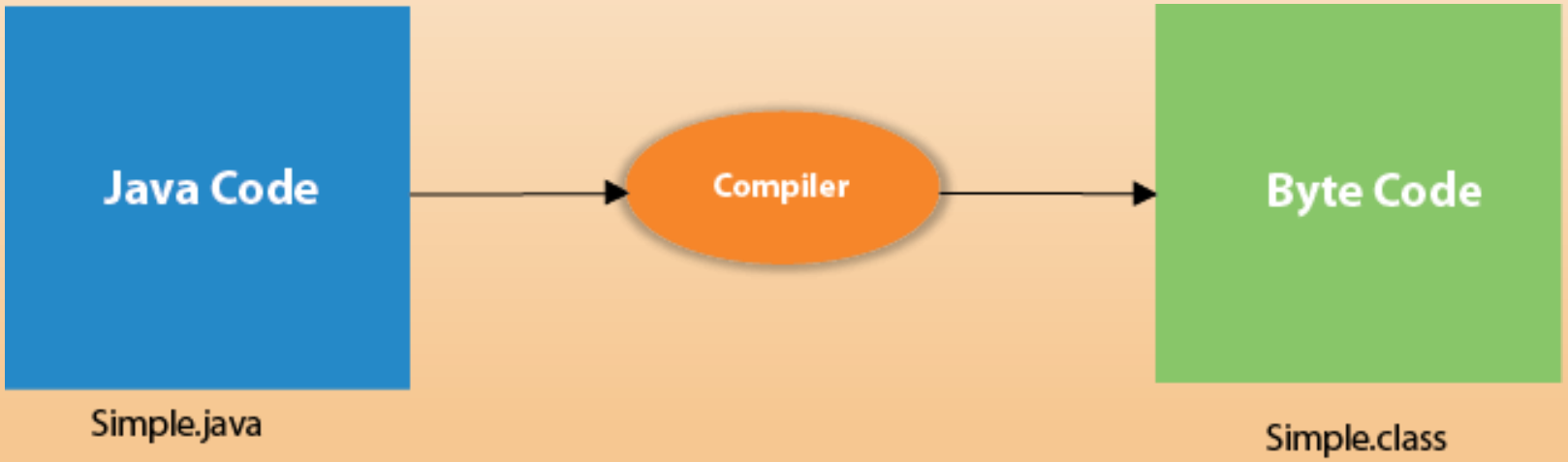
JAVA IDENTIFIERS RULES

Identifier is a name given to a variable, class, or method.

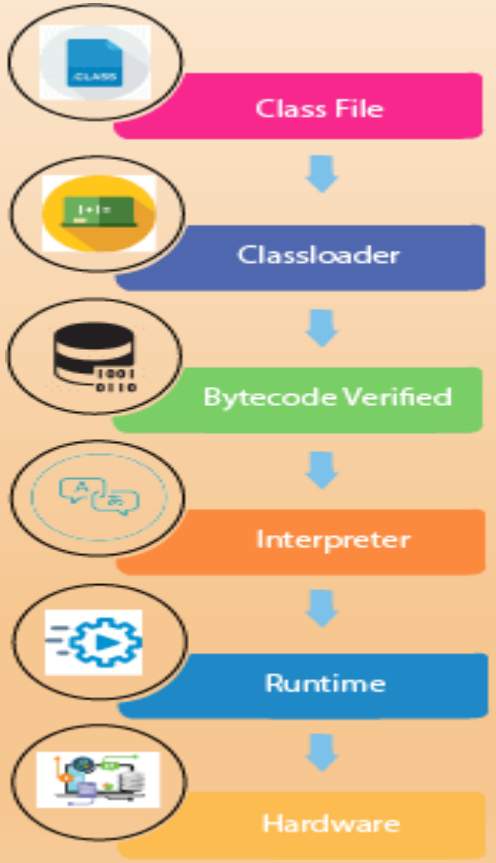
- Java identifier
  - Can contain letter, number, underscore (_), or dollar sign ($).
  - Cannot start with number.
  - Identifiers are case sensitive
  - Have no maximum length.
  - Can not be a keyword, but it can contain a keyword as part of its name.


Class File
Windows JVM
Linux JVM
Mac/OS JVM
0
1
0
0
1
0
0
1
0
Windows
Linux
MAC/OS

What happens at compile time?

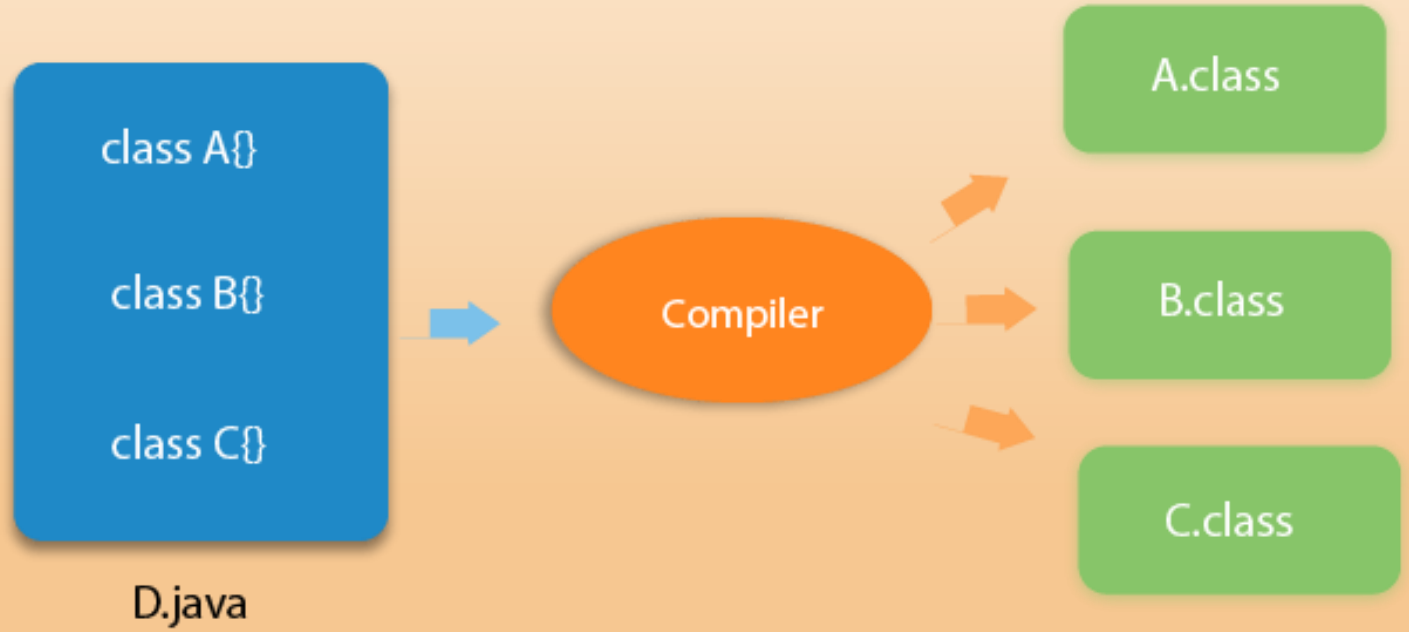


What happens at runtime?



Classloader: It is the subsystem of JVM that is used to load class files.

Bytecode Verifier: Checks the code fragments for illegal code that can violate access rights to objects.

Interpreter: Read bytecode stream then execute the instructions.

Can you have multiple classes in a java source file?