**Java** is a set of several [computer software](http://en.wikipedia.org/wiki/Computer_software) products and specifications developed by [Sun Microsystems](http://en.wikipedia.org/wiki/Sun_Microsystems), later acquired by [Oracle Corporation](http://en.wikipedia.org/wiki/Oracle_Corporation), that provides a system for developing [application software](http://en.wikipedia.org/wiki/Application_software) and deploying it in a [cross-platform](http://en.wikipedia.org/wiki/Cross-platform) computing environment. Java is used in a wide variety of [computing platforms](http://en.wikipedia.org/wiki/Computing_platform) from [embedded devices](http://en.wikipedia.org/wiki/Embedded_device) and [mobile phones](http://en.wikipedia.org/wiki/Mobile_phone) on the low end, to [enterprise servers](http://en.wikipedia.org/wiki/Enterprise_server)and [supercomputers](http://en.wikipedia.org/wiki/Supercomputer) on the high end. While less common, [Java applets](http://en.wikipedia.org/wiki/Java_applet) are sometimes used to provide improved and secure functions while browsing the [World Wide Web](http://en.wikipedia.org/wiki/World_Wide_Web) on [desktop computers](http://en.wikipedia.org/wiki/Desktop_computer).

Writing in the [Java programming language](http://en.wikipedia.org/wiki/Java_(programming_language)) is the primary way to produce code that will be deployed as [Java byte code](http://en.wikipedia.org/wiki/Java_byte_code); byte code[compilers](http://en.wikipedia.org/wiki/Compiler) are also available for other languages, including [Ada](http://en.wikipedia.org/wiki/Ada_(programming_language)), [JavaScript](http://en.wikipedia.org/wiki/JavaScript), [Python](http://en.wikipedia.org/wiki/Python_(programming_language)), and [Ruby](http://en.wikipedia.org/wiki/Ruby_(programming_language)). Several languages have been designed to run natively on the [Java Virtual Machine](http://en.wikipedia.org/wiki/Java_Virtual_Machine) (JVM), including [Scala](http://en.wikipedia.org/wiki/Scala_(programming_language)), [Clojure](http://en.wikipedia.org/wiki/Clojure) and [Groovy](http://en.wikipedia.org/wiki/Groovy_(programming_language)). [Java syntax](http://en.wikipedia.org/wiki/Java_syntax) borrows heavily from [C](http://en.wikipedia.org/wiki/C_(programming_language)) and [C++](http://en.wikipedia.org/wiki/C%2B%2B), but object-oriented features are modeled after [Smalltalk](http://en.wikipedia.org/wiki/Smalltalk) and [Objective-C](http://en.wikipedia.org/wiki/Objective-C).[[9]](http://en.wikipedia.org/wiki/Java_(software_platform)#cite_note-9) Java eliminates certain low-level constructs such as[pointers](http://en.wikipedia.org/wiki/Pointer_(computer_programming)) and has a very simple memory model where every object is [allocated on the heap](http://en.wikipedia.org/wiki/Dynamic_memory_allocation) and all variables of object types are[references](http://en.wikipedia.org/wiki/Reference_(computer_science)). Memory management is handled through integrated automatic [garbage collection](http://en.wikipedia.org/wiki/Garbage_collection_(computer_science)) performed by the JVM.

On November 13, 2006, owner Sun Microsystems made the bulk of its implementation of Java available under the [GNU General Public License](http://en.wikipedia.org/wiki/GNU_General_Public_License) (GPL).[[10]](http://en.wikipedia.org/wiki/Java_(software_platform)#cite_note-10)[[11]](http://en.wikipedia.org/wiki/Java_(software_platform)#cite_note-11)