

Python vs Java

In Python there is no need for semicolon and curly braces in the program as compared to Java which will show syntax error if one forgot to add curly braces or semicolon in the program.

Python code requires fewer lines of code as compare to Java to write the same program. For Example, Here is a code in Java

Python code requires fewer resources to run since it directly gets compiled into machine code as compare to Java which first compiles to byte code, then needs to be compiled to machine code by the Java Virtual Machine(JVM).

Python is dynamically typed that means one has to only assign a value to a variable at runtime, Python interpreter will detect the data type on itself as compare to Java where one has to explicitly mention the data type.

Python vs C++

Python is more memory efficient because of its automatic garbage collection as compared to C++ which does not support garbage collection.

Python code is easy to learn, use and write as compare to C++ which is hard to understand and use because of its complex syntax.

Python uses an interpreter to execute the code which makes it easy to run on almost every computer or operating system. as compare to C++ code which does not run on other computers until it is compiled on that computer.

Python can be easily used for rapid application development because of its smaller code size as compare to C++ which is impossible to use for rapid application development because of it large code fragments.

Readability of Python code is more since it resembles actual English as compared to C++ code which contains hard to read structures and syntaxes.

Variables defined in Python are easily accessible outside the loop as compare to C++ in which scope of variables is limited within the loop.

How Python Differs from Other Languages

Python is easy to learn.

**Python is good for starting
out because the syntax of
Python is very simple and
understandable.**

**We can create GUI and CGI in
a few lines of code.**

Who uses Python?

**Python is used for developing
many popular Web products**

Youtube.

Google.

Yahoo! map.

Shopzilla.

Ultraseek.

Python vs Java

Point of Difference	Python	Java
Program run time	Python program runs slower than Java	Java program runs faster than python
Program development time	Takes less time than Java	Takes more time for developing the same program
Length of the code	Python code is 3-5 times shorter than Java code	Java code is longer than Python
Type	Python is dynamically typed	Java is not dynamically typed

Python vs C++

Point of Difference	Python	C++
Length of code	Python code is 5-10 time shorter than C++ code	C++ code is 5-10 times longer than Python code
OOPS	Python is pure OOPS programming language	C++ is not a pure OOPS programming language