Conduct an internet search on programming languages. Identify a language that is compiled and compare the features of this language with Python, which is an interpreted language. Discuss the advantage and disadvantages of each and provide one example each of where interpreted and compiled languages would be most appropriate.

**\*Note:** Your post must be 75 words minimum for full credit.

Interpreted code must be translated at run-time from any format to CPU machine instructions. This translation is done by an interpreter. Python is traditionally an interpreted language. Interpreted languages are easier to learn and use, allow complex tasks to be performed quickly, edit and run code quickly, and allow addition of dynamic, interactive website functionality1.

Compiled code can be executed directly by the computer's CPU. An example of a compiled language is Java or C. Compiled code can be optimized for the target hardware, but requires a compiler, and is slower to deploy than interpreted code2.

Java is typically used for all kinds of web applications, and is intended to be run on all platforms without needing to be recompiled. It is often used in enterprise. Python is highly extendable, and with its many libraries, is exceptional for use in machine learning3.

A caveat to this discussion is that the dichotomy of interpreted vs. compiled is no longer relevant today. Most commonly used languages today work by compiling a program into an intermediate format such as bytecode, and then executing that in an interpreter. Examples include Java, C#, Python, Ruby, and Lua and others.

References:

1. <https://www.sqa.org.uk/e-learning/ClientSide01CD/page_15.htm>
2. <https://www.sqa.org.uk/e-learning/ClientSide01CD/page_16.htm#advdiscompiled>
3. <https://www.upwork.com/hiring/data/r-vs-java-vs-python-which-is-best/>