Trade-offs from this ideal involve finding enough programmers who know the language to build a team, the availability of compilers for that language, and the efficiency with which programs written in a given language execute.  
The purpose of programming is to find a sequence of instructions that will automate the performance of a task (which can be as complex as an operating system) on a computer, often for solving a given problem.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
However, readability is more than just programming style.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
Programming languages are essential for software development.  
Use of a static code analysis tool can help detect some possible problems.  
Ideally, the programming language best suited for the task at hand will be selected.  
Methods of measuring programming language popularity include: counting the number of job advertisements that mention the language, the number of books sold and courses teaching the language (this overestimates the importance of newer languages), and estimates of the number of existing lines of code written in the language (this underestimates the number of users of business languages such as COBOL).  
There exist a lot of different approaches for each of those tasks.  
Provided the functions in a library follow the appropriate run-time conventions (e.g., method of passing arguments), then these functions may be written in any other language.  
For example, when a bug in a compiler can make it crash when parsing some large source file, a simplification of the test case that results in only few lines from the original source file can be sufficient to reproduce the same crash.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.