It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
Expert programmers are familiar with a variety of well-established algorithms and their respective complexities and use this knowledge to choose algorithms that are best suited to the circumstances.  
Normally the first step in debugging is to attempt to reproduce the problem.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
Programming languages are essential for software development.  
Scripting and breakpointing is also part of this process.  
Normally the first step in debugging is to attempt to reproduce the problem.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
The source code of a program is written in one or more languages that are intelligible to programmers, rather than machine code, which is directly executed by the central processing unit.  
One approach popular for requirements analysis is Use Case analysis.  
However, with the concept of the stored-program computer introduced in 1949, both programs and data were stored and manipulated in the same way in computer memory.  
Some of these factors include:  
 The presentation aspects of this (such as indents, line breaks, color highlighting, and so on) are often handled by the source code editor, but the content aspects reflect the programmer's talent and skills.  
Techniques like Code refactoring can enhance readability.  
In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages.  
Many programmers use forms of Agile software development where the various stages of formal software development are more integrated together into short cycles that take a few weeks rather than years.