Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users..  
Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability.  
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.  
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.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
Their jobs usually involve:  
 Although programming has been presented in the media as a somewhat mathematical subject, some research shows that good programmers have strong skills in natural human languages, and that learning to code is similar to learning a foreign language.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
Ideally, the programming language best suited for the task at hand will be selected.  
 Different programming languages support different styles of programming (called programming paradigms).  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
Many applications use a mix of several languages in their construction and use.  
However, because an assembly language is little more than a different notation for a machine language, two machines with different instruction sets also have different assembly languages.  
For example, COBOL is still strong in corporate data centers often on large mainframe computers, Fortran in engineering applications, scripting languages in Web development, and C in embedded software.