Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to 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.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
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.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
Some languages are more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages.  
This is interpreted into machine code.  
The choice of language used is subject to many considerations, such as company policy, suitability to task, availability of third-party packages, or individual preference.  
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.  
Transpiling on the other hand, takes the source-code from a high-level programming language and converts it into bytecode.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
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.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
 Debugging is often done with IDEs. Standalone debuggers like GDB are also used, and these often provide less of a visual environment, usually using a command line.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.