Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability..  
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.  
 These compiled languages allow the programmer to write programs in terms that are syntactically richer, and more capable of abstracting the code, making it easy to target varying machine instruction sets via compilation declarations and heuristics.  
In 1206, the Arab engineer Al-Jazari invented a programmable drum machine where a musical mechanical automaton could be made to play different rhythms and drum patterns, via pegs and cams.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
However, readability is more than just programming style.  
 Following a consistent programming style often helps readability.  
 It is very difficult to determine what are the most popular modern programming languages.  
 The academic field and the engineering practice of computer programming are both largely concerned with discovering and implementing the most efficient algorithms for a given class of problems.  
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.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.