Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability..  
Scripting and breakpointing is also part of this process.  
One approach popular for requirements analysis is Use Case analysis.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
Many applications use a mix of several languages in their construction and use.  
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 the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form.  
 Different programming languages support different styles of programming (called programming paradigms).  
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 are many approaches to the Software development process.  
Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists.  
  
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.