As early as the 9th century, a programmable music sequencer was invented by the Persian Banu Musa brothers, who described an automated mechanical flute player in the Book of Ingenious Devices..  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
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.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
 Different programming languages support different styles of programming (called programming paradigms).  
  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
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.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
The following properties are among the most important:  
  
 In computer programming, readability refers to the ease with which a human reader can comprehend the purpose, control flow, and operation of source code.  
Ideally, the programming language best suited for the task at hand will be selected.  
Languages form an approximate spectrum from "low-level" to "high-level"; "low-level" languages are typically more machine-oriented and faster to execute, whereas "high-level" languages are more abstract and easier to use but execute less quickly.