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..  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
Programming languages are essential for software development.  
  
Many applications use a mix of several languages in their construction and use.  
 Allen Downey, in his book How To Think Like A Computer Scientist, writes:  
 Many computer languages provide a mechanism to call functions provided by shared libraries.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
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.  
  
The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.  
Normally the first step in debugging is to attempt to reproduce the problem.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
 Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.  
When debugging the problem in a GUI, the programmer can try to skip some user interaction from the original problem description and check if remaining actions are sufficient for bugs to appear.