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..  
 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.  
 In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form.  
Many applications use a mix of several languages in their construction and use.  
 Different programming languages support different styles of programming (called programming paradigms).  
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.  
  
The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
Programming languages are essential for software development.  
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.  
 Readability is important because programmers spend the majority of their time reading, trying to understand, reusing and modifying existing source code, rather than writing new source code.  
 Code-breaking algorithms have also existed for centuries.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.  
In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages.