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.  
  
 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.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
One approach popular for requirements analysis is Use Case analysis.  
Many programmers use forms of Agile software development where the various stages of formal software development are more integrated together into short cycles that take a few weeks rather than years.  
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.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
 Following a consistent programming style often helps readability.  
 Programmable devices have existed for centuries.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
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.  
 Different programming languages support different styles of programming (called programming paradigms).  
 Computer programmers are those who write computer software.