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.  
Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
There exist a lot of different approaches for each of those tasks.  
There are many approaches to the Software development process.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
 Different programming languages support different styles of programming (called programming paradigms).  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
Many applications use a mix of several languages in their construction and use.  
Programming languages are essential for software development.  
 The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging).