Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation..  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
 Code-breaking algorithms have also existed for centuries.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
 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.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
Trade-offs from this ideal involve finding enough programmers who know the language to build a team, the availability of compilers for that language, and the efficiency with which programs written in a given language execute.  
Scripting and breakpointing is also part of this process.  
 New languages are generally designed around the syntax of a prior language with new functionality added, (for example C++ adds object-orientation to C, and Java adds memory management and bytecode to C++, but as a result, loses efficiency and the ability for low-level manipulation).  
 Auxiliary tasks accompanying and related to programming include analyzing requirements, testing, debugging (investigating and fixing problems), implementation of build systems, and management of derived artifacts, such as programs' machine code.  
 In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
  
The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
 Computer programmers are those who write computer software.