In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them..  
 It is very difficult to determine what are the most popular modern programming languages.  
 In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form.  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
 Debugging is often done with IDEs. Standalone debuggers like GDB are also used, and these often provide less of a visual environment, usually using a command line.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
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.  
Assembly languages were soon developed that let the programmer specify instruction in a text format (e.g., ADD X, TOTAL), with abbreviations for each operation code and meaningful names for specifying addresses.  
 Programmable devices have existed for centuries.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
 Various visual programming languages have also been developed with the intent to resolve readability concerns by adopting non-traditional approaches to code structure and display.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
 Code-breaking algorithms have also existed for centuries.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.