Programming involves tasks such as analysis, generating algorithms, profiling algorithms' accuracy and resource consumption, and the implementation of algorithms (usually in a particular programming language, commonly referred to as coding).  
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.  
As early as the 9th century, a programmable music sequencer was invented by the Persian Banu Musa brothers, who described an automated mechanical flute player in the Book of Ingenious Devices.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
There are many approaches to the Software development process.  
This is interpreted into machine code.  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.  
For this purpose, algorithms are classified into orders using so-called Big O notation, which expresses resource use, such as execution time or memory consumption, in terms of the size of an input.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability.  
  
 Computer programming is the process of performing particular computations (or more generally, accomplishing specific computing results), usually by designing and building executable computer programs.