Some of these factors include:  
 The presentation aspects of this (such as indents, line breaks, color highlighting, and so on) are often handled by the source code editor, but the content aspects reflect the programmer's talent and skills..  
 Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.  
For example, COBOL is still strong in corporate data centers often on large mainframe computers, Fortran in engineering applications, scripting languages in Web development, and C in embedded software.  
Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit.  
Languages form an approximate spectrum from "low-level" to "high-level"; "low-level" languages are typically more machine-oriented and faster to execute, whereas "high-level" languages are more abstract and easier to use but execute less quickly.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
 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.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
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.  
 Code-breaking algorithms have also existed for centuries.