However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
There are many approaches to the Software development process.  
Compiling takes the source code from a low-level programming language and converts it into machine code.  
In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages.  
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.  
One approach popular for requirements analysis is Use Case analysis.  
Integrated development environments (IDEs) aim to integrate all such help.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
The source code of a program is written in one or more languages that are intelligible to programmers, rather than machine code, which is directly executed by the central processing unit.  
To produce machine code, the source code must either be compiled or transpiled.  
Techniques like Code refactoring can enhance readability.  
Transpiling on the other hand, takes the source-code from a high-level programming language and converts it into bytecode.  
Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability.  
Compiling takes the source code from a low-level programming language and converts it into machine code.  
Normally the first step in debugging is to attempt to reproduce the problem.