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.  
Also, those involved with software development may at times engage in reverse engineering, which is the practice of seeking to understand an existing program so as to re-implement its function in some way.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
Transpiling on the other hand, takes the source-code from a high-level programming language and converts it into bytecode.  
The choice of language used is subject to many considerations, such as company policy, suitability to task, availability of third-party packages, or individual preference.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
Use of a static code analysis tool can help detect some possible problems.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists.  
There are many approaches to the Software development process.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.  
In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages.  
However, because an assembly language is little more than a different notation for a machine language, two machines with different instruction sets also have different assembly languages.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
However, readability is more than just programming style.