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.  
Many applications use a mix of several languages in their construction and use.  
Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation.  
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.  
Integrated development environments (IDEs) aim to integrate all such help.  
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.  
Their jobs usually involve:  
 Although programming has been presented in the media as a somewhat mathematical subject, some research shows that good programmers have strong skills in natural human languages, and that learning to code is similar to learning a foreign language.  
For example, when a bug in a compiler can make it crash when parsing some large source file, a simplification of the test case that results in only few lines from the original source file can be sufficient to reproduce the same crash.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
One approach popular for requirements analysis is Use Case analysis.  
Provided the functions in a library follow the appropriate run-time conventions (e.g., method of passing arguments), then these functions may be written in any other language.  
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 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.  
Some languages are more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages.  
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.