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..  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
However, with the concept of the stored-program computer introduced in 1949, both programs and data were stored and manipulated in the same way in computer memory.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
 Readability is important because programmers spend the majority of their time reading, trying to understand, reusing and modifying existing source code, rather than writing new source code.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
There are many approaches to the Software development process.  
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.  
Ideally, the programming language best suited for the task at hand will be selected.  
Use of a static code analysis tool can help detect some possible problems.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.  
 Allen Downey, in his book How To Think Like A Computer Scientist, writes:  
 Many computer languages provide a mechanism to call functions provided by shared libraries.  
While these are sometimes considered programming, often the term software development is used for this larger overall process – with the terms programming, implementation, and coding reserved for the writing and editing of code per se.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
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.