This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
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.  
Normally the first step in debugging is to attempt to reproduce the problem.  
Ideally, the programming language best suited for the task at hand will be selected.  
Many applications use a mix of several languages in their construction and use.  
Programming languages are essential for software development.  
The following properties are among the most important:  
  
 In computer programming, readability refers to the ease with which a human reader can comprehend the purpose, control flow, and operation of source code.  
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.  
Later a control panel (plug board) added to his 1906 Type I Tabulator allowed it to be programmed for different jobs, and by the late 1940s, unit record equipment such as the IBM 602 and IBM 604, were programmed by control panels in a similar way, as were the first electronic computers.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
The purpose of programming is to find a sequence of instructions that will automate the performance of a task (which can be as complex as an operating system) on a computer, often for solving a given problem.  
 Different programming languages support different styles of programming (called programming paradigms).  
Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability.  
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.