This can be a non-trivial task, for example as with parallel processes or some unusual software bugs..  
 In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form.  
There exist a lot of different approaches for each of those tasks.  
 These compiled languages allow the programmer to write programs in terms that are syntactically richer, and more capable of abstracting the code, making it easy to target varying machine instruction sets via compilation declarations and heuristics.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
Many applications use a mix of several languages in their construction and use.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
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.  
Expert programmers are familiar with a variety of well-established algorithms and their respective complexities and use this knowledge to choose algorithms that are best suited to the circumstances.  
For this purpose, algorithms are classified into orders using so-called Big O notation, which expresses resource use, such as execution time or memory consumption, in terms of the size of an input.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
Scripting and breakpointing is also part of this process.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
 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.