This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
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.  
Programming languages are essential for software development.  
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.  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
There exist a lot of different approaches for each of those tasks.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
Transpiling on the other hand, takes the source-code from a high-level programming language and converts it into bytecode.  
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.  
 Programs were mostly entered using punched cards or paper tape.  
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.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
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.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.