This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
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.  
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.  
FORTRAN, the first widely used high-level language to have a functional implementation, came out in 1957, and many other languages were soon developed—in particular, COBOL aimed at commercial data processing, and Lisp for computer research.  
When debugging the problem in a GUI, the programmer can try to skip some user interaction from the original problem description and check if remaining actions are sufficient for bugs to appear.  
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.  
There are many approaches to the Software development process.  
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 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.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
When debugging the problem in a GUI, the programmer can try to skip some user interaction from the original problem description and check if remaining actions are sufficient for bugs to appear.  
Assembly languages were soon developed that let the programmer specify instruction in a text format (e.g., ADD X, TOTAL), with abbreviations for each operation code and meaningful names for specifying addresses.  
Compiling takes the source code from a low-level programming language and converts it into machine code.  
FORTRAN, the first widely used high-level language to have a functional implementation, came out in 1957, and many other languages were soon developed—in particular, COBOL aimed at commercial data processing, and Lisp for computer research.