This can be a non-trivial task, for example as with parallel processes or some unusual software bugs..  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
There are many approaches to the Software development process.  
 The academic field and the engineering practice of computer programming are both largely concerned with discovering and implementing the most efficient algorithms for a given class of problems.  
 Computer programmers are those who write computer software.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.  
 It is very difficult to determine what are the most popular modern programming languages.  
Techniques like Code refactoring can enhance readability.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
 Different programming languages support different styles of programming (called programming paradigms).  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
 Auxiliary tasks accompanying and related to programming include analyzing requirements, testing, debugging (investigating and fixing problems), implementation of build systems, and management of derived artifacts, such as programs' machine code.  
 Debugging is often done with IDEs. Standalone debuggers like GDB are also used, and these often provide less of a visual environment, usually using a command line.  
Normally the first step in debugging is to attempt to reproduce the problem.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.