Use of a static code analysis tool can help detect some possible problems..  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
For example, COBOL is still strong in corporate data centers often on large mainframe computers, Fortran in engineering applications, scripting languages in Web development, and C in embedded software.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
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.  
 Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.  
 The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging).  
For example, when a bug in a compiler can make it crash when parsing some large source file, a simplification of the test case that results in only few lines from the original source file can be sufficient to reproduce the same crash.  
 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.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
 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.