The choice of language used is subject to many considerations, such as company policy, suitability to task, availability of third-party packages, or individual preference..  
 New languages are generally designed around the syntax of a prior language with new functionality added, (for example C++ adds object-orientation to C, and Java adds memory management and bytecode to C++, but as a result, loses efficiency and the ability for low-level manipulation).  
  
 Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
However, readability is more than just programming style.  
Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability.  
 Code-breaking algorithms have also existed for centuries.  
 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 Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
 It is very difficult to determine what are the most popular modern programming languages.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
 Different programming languages support different styles of programming (called programming paradigms).  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.