Languages form an approximate spectrum from "low-level" to "high-level"; "low-level" languages are typically more machine-oriented and faster to execute, whereas "high-level" languages are more abstract and easier to use but execute less quickly..  
 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).  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
 Following a consistent programming style often helps readability.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
However, readability is more than just programming style.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
 Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.  
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.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists.  
There are many approaches to the Software development process.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.