After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug..  
Techniques like Code refactoring can enhance readability.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
 Following a consistent programming style often helps readability.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
 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).  
 Code-breaking algorithms have also existed for centuries.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
There are many approaches to the Software development process.  
Programming languages are essential for software development.  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
 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 a very important task in the software development process since having defects in a program can have significant consequences for its users.  
However, with the concept of the stored-program computer introduced in 1949, both programs and data were stored and manipulated in the same way in computer memory.