Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment..  
  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.  
 Various visual programming languages have also been developed with the intent to resolve readability concerns by adopting non-traditional approaches to code structure and display.  
 Programs were mostly entered using punched cards or paper tape.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
Programming languages are essential for software development.  
Their jobs usually involve:  
 Although programming has been presented in the media as a somewhat mathematical subject, some research shows that good programmers have strong skills in natural human languages, and that learning to code is similar to learning a foreign language.  
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.  
Trade-offs from this ideal involve finding enough programmers who know the language to build a team, the availability of compilers for that language, and the efficiency with which programs written in a given language execute.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
  
The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.  
 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).  
However, readability is more than just programming style.  
 The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging).