Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment..  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
Some languages are more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
Proficient programming usually requires expertise in several different subjects, including knowledge of the application domain, details of programming languages and generic code libraries, specialized algorithms, and formal logic.  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
  
Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation.  
Scripting and breakpointing is also part of this process.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
There exist a lot of different approaches for each of those tasks.  
 Programs were mostly entered using punched cards or paper tape.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.  
When debugging the problem in a GUI, the programmer can try to skip some user interaction from the original problem description and check if remaining actions are sufficient for bugs to appear.