Different programming languages support different styles of programming (called programming paradigms)..  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
 Debugging is often done with IDEs. Standalone debuggers like GDB are also used, and these often provide less of a visual environment, usually using a command line.  
 Allen Downey, in his book How To Think Like A Computer Scientist, writes:  
 Many computer languages provide a mechanism to call functions provided by shared libraries.  
Assembly languages were soon developed that let the programmer specify instruction in a text format (e.g., ADD X, TOTAL), with abbreviations for each operation code and meaningful names for specifying addresses.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
 Code-breaking algorithms have also existed for centuries.  
Use of a static code analysis tool can help detect some possible problems.  
 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.  
In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages.  
 These compiled languages allow the programmer to write programs in terms that are syntactically richer, and more capable of abstracting the code, making it easy to target varying machine instruction sets via compilation declarations and heuristics.  
 Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.  
 Computer programmers are those who write computer software.  
Programming languages are essential for software development.  
Scripting and breakpointing is also part of this process.