A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it..  
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.  
 In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form.  
 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).  
Later a control panel (plug board) added to his 1906 Type I Tabulator allowed it to be programmed for different jobs, and by the late 1940s, unit record equipment such as the IBM 602 and IBM 604, were programmed by control panels in a similar way, as were the first electronic computers.  
Integrated development environments (IDEs) aim to integrate all such help.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
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.  
 Computer programmers are those who write computer software.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit.  
 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.  
Scripting and breakpointing is also part of this process.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.