Also, specific user environment and usage history can make it difficult to reproduce the problem..  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
However, readability is more than just programming style.  
There exist a lot of different approaches for each of those tasks.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
In 1206, the Arab engineer Al-Jazari invented a programmable drum machine where a musical mechanical automaton could be made to play different rhythms and drum patterns, via pegs and cams.  
For this purpose, algorithms are classified into orders using so-called Big O notation, which expresses resource use, such as execution time or memory consumption, in terms of the size of an input.  
FORTRAN, the first widely used high-level language to have a functional implementation, came out in 1957, and many other languages were soon developed—in particular, COBOL aimed at commercial data processing, and Lisp for computer research.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
 Different programming languages support different styles of programming (called programming paradigms).  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
 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.