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..  
Normally the first step in debugging is to attempt to reproduce the problem.  
 Programs were mostly entered using punched cards or paper tape.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
There exist a lot of different approaches for each of those tasks.  
Many applications use a mix of several languages in their construction and use.  
 It is very difficult to determine what are the most popular modern programming languages.  
Integrated development environments (IDEs) aim to integrate all such help.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
 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).  
 In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
However, readability is more than just programming style.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
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.