Following a consistent programming style often helps readability..  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
Trade-offs from this ideal involve finding enough programmers who know the language to build a team, the availability of compilers for that language, and the efficiency with which programs written in a given language execute.  
Provided the functions in a library follow the appropriate run-time conventions (e.g., method of passing arguments), then these functions may be written in any other language.  
 The first computer program is generally dated to 1843, when mathematician Ada Lovelace published an algorithm to calculate a sequence of Bernoulli numbers, intended to be carried out by Charles Babbage's Analytical Engine.  
 In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
 Code-breaking algorithms have also existed for centuries.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
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.  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
However, because an assembly language is little more than a different notation for a machine language, two machines with different instruction sets also have different assembly languages.