Compiling takes the source code from a low-level programming language and converts it into machine code.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
Compiling takes the source code from a low-level programming language and converts it into machine code.  
This is interpreted into machine code.  
Many applications use a mix of several languages in their construction and use.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
This is interpreted into machine code.  
Use of a static code analysis tool can help detect some possible problems.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
As early as the 9th century, a programmable music sequencer was invented by the Persian Banu Musa brothers, who described an automated mechanical flute player in the Book of Ingenious Devices.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
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.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
Use of a static code analysis tool can help detect some possible problems.