Unreadable code often leads to bugs, inefficiencies, and duplicated code..  
 Following a consistent programming style often helps readability.  
In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
Programming languages are essential for software development.  
 Code-breaking algorithms have also existed for centuries.  
Integrated development environments (IDEs) aim to integrate all such help.  
 Computer programmers are those who write computer software.  
 Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
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.  
 It is very difficult to determine what are the most popular modern programming languages.  
 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.  
The choice of language used is subject to many considerations, such as company policy, suitability to task, availability of third-party packages, or individual preference.  
One approach popular for requirements analysis is Use Case analysis.