Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users..  
  
Languages form an approximate spectrum from "low-level" to "high-level"; "low-level" languages are typically more machine-oriented and faster to execute, whereas "high-level" languages are more abstract and easier to use but execute less quickly.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists.  
Programming languages are essential for software development.  
One approach popular for requirements analysis is Use Case analysis.  
Many programmers use forms of Agile software development where the various stages of formal software development are more integrated together into short cycles that take a few weeks rather than years.  
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.  
Integrated development environments (IDEs) aim to integrate all such help.  
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 Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
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.  
 Different programming languages support different styles of programming (called programming paradigms).