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. Techniques like Code refactoring can enhance readability. It is usually easier to code in "high-level" languages than in "low-level" ones. 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. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. Readability is important because programmers spend the majority of their time reading, trying to understand, reusing and modifying existing source code, rather than writing new source code.

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. One approach popular for requirements analysis is Use Case analysis. 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. They are the building blocks for all software, from the simplest applications to the most sophisticated ones. Use of a static code analysis tool can help detect some possible problems. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation. It affects the aspects of quality above, including portability, usability and most importantly maintainability. It is very difficult to determine what are the most popular modern programming languages. Programmable devices have existed for centuries. There exist a lot of different approaches for each of those tasks. Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users. 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. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it. Ideally, the programming language best suited for the task at hand will be selected. In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages. Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment. Use of a static code analysis tool can help detect some possible problems.