However, readability is more than just programming style. 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. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. Techniques like Code refactoring can enhance readability. 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. Unreadable code often leads to bugs, inefficiencies, and duplicated code. It affects the aspects of quality above, including portability, usability and most importantly maintainability. Normally the first step in debugging is to attempt to reproduce the problem. Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications. Computer programmers are those who write computer software. Unreadable code often leads to bugs, inefficiencies, and duplicated code. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. Use of a static code analysis tool can help detect some possible problems. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. Methods of measuring programming language popularity include: counting the number of job advertisements that mention the language, the number of books sold and courses teaching the language (this overestimates the importance of newer languages), and estimates of the number of existing lines of code written in the language (this underestimates the number of users of business languages such as COBOL). Various visual programming languages have also been developed with the intent to resolve readability concerns by adopting non-traditional approaches to code structure and display. Their jobs usually involve: Although programming has been presented in the media as a somewhat mathematical subject, some research shows that good programmers have strong skills in natural human languages, and that learning to code is similar to learning a foreign language. Normally the first step in debugging is to attempt to reproduce the problem. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic 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. 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 following properties are among the most important: In computer programming, readability refers to the ease with which a human reader can comprehend the purpose, control flow, and operation of source code.