Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. 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. Integrated development environments (IDEs) aim to integrate all such help. The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'. It affects the aspects of quality above, including portability, usability and most importantly maintainability. This can be a non-trivial task, for example as with parallel processes or some unusual software bugs. The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging). However, with the concept of the stored-program computer introduced in 1949, both programs and data were stored and manipulated in the same way in computer memory. Programmable devices have existed for centuries. There are many approaches to the Software development process. Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability. 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. Computer programmers are those who write computer software. A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it. However, with the concept of the stored-program computer introduced in 1949, both programs and data were stored and manipulated in the same way in computer memory. Unreadable code often leads to bugs, inefficiencies, and duplicated code. Different programming languages support different styles of programming (called programming paradigms). Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit. Programmable devices have existed for centuries. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. Use of a static code analysis tool can help detect some possible problems. Assembly languages were soon developed that let the programmer specify instruction in a text format (e.g., ADD X, TOTAL), with abbreviations for each operation code and meaningful names for specifying addresses. Ideally, the programming language best suited for the task at hand will be selected. However, readability is more than just programming style.