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. Following a consistent programming style often helps readability. Ideally, the programming language best suited for the task at hand will be selected. Following a consistent programming style often helps readability. Code-breaking algorithms have also existed for centuries. Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards. One approach popular for requirements analysis is Use Case analysis. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. Later a control panel (plug board) added to his 1906 Type I Tabulator allowed it to be programmed for different jobs, and by the late 1940s, unit record equipment such as the IBM 602 and IBM 604, were programmed by control panels in a similar way, as were the first electronic computers. Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications. However, Charles Babbage had already written his first program for the Analytical Engine in 1837. Allen Downey, in his book How To Think Like A Computer Scientist, writes: Many computer languages provide a mechanism to call functions provided by shared libraries. In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages. By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers. However, readability is more than just programming style. 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. Programmable devices have existed for centuries. It affects the aspects of quality above, including portability, usability and most importantly maintainability. The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'. It is very difficult to determine what are the most popular modern programming languages. Programming languages are essential for software development. Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA). Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications. 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.