

Different programming languages support different styles of programming (called programming paradigms). Some of these factors include: The presentation aspects of this (such as indents, line breaks, color highlighting, and so on) are often handled by the source code editor, but the content aspects reflect the programmer's talent and skills. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process. Some languages are more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages. Unreadable code often leads to bugs, inefficiencies, and duplicated code. It is usually easier to code in "high-level" languages than in "low-level" ones. It affects the aspects of quality above, including portability, usability and most importantly maintainability. 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. Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards. 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. For example, when a bug in a compiler can make it crash when parsing some large source file, a simplification of the test case that results in only few lines from the original source file can be sufficient to reproduce the same crash. Whatever the approach to development may be, the final program must satisfy some fundamental properties. Techniques like Code refactoring can enhance readability. Unreadable code often leads to bugs, inefficiencies, and duplicated code. Following a consistent programming style often helps readability. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. This can be a non-trivial task, for example as with parallel processes or some unusual software bugs. Unreadable code often leads to bugs, inefficiencies, and duplicated code. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. It is very difficult to determine what are the most popular modern programming languages. In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form. Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards. Integrated development environments (IDEs) aim to integrate all such help. Integrated development environments (IDEs) aim to integrate all such help. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.