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. 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. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability. Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation. Auxiliary tasks accompanying and related to programming include analyzing requirements, testing, debugging (investigating and fixing problems), implementation of build systems, and management of derived artifacts, such as programs' machine code. 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. It is very difficult to determine what are the most popular modern programming languages. Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. However, readability is more than just programming style. 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. The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'. 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. For example, COBOL is still strong in corporate data centers often on large mainframe computers, Fortran in engineering applications, scripting languages in Web development, and C in embedded software. Many applications use a mix of several languages in their construction and use. Many applications use a mix of several languages in their construction and use. For example, COBOL is still strong in corporate data centers often on large mainframe computers, Fortran in engineering applications, scripting languages in Web development, and C in embedded software. It affects the aspects of quality above, including portability, usability and most importantly maintainability. Techniques like Code refactoring can enhance readability. 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. By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers. Expert programmers are familiar with a variety of well-established algorithms and their respective complexities and use this knowledge to choose algorithms that are best suited to the circumstances.