Computer programmers are those who write computer software. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form. It is very difficult to determine what are the most popular modern programming languages. 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. It is very difficult to determine what are the most popular modern programming languages. They are the building blocks for all software, from the simplest applications to the most sophisticated ones. When debugging the problem in a GUI, the programmer can try to skip some user interaction from the original problem description and check if remaining actions are sufficient for bugs to appear. After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug. Scripting and breakpointing is also part of this process. One approach popular for requirements analysis is Use Case analysis. 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. The first computer program is generally dated to 1843, when mathematician Ada Lovelace published an algorithm to calculate a sequence of Bernoulli numbers, intended to be carried out by Charles Babbage's Analytical Engine. Programmable devices have existed for centuries. In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form. 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. There are many approaches to the Software development process. 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. New languages are generally designed around the syntax of a prior language with new functionality added, (for example C++ adds object-orientation to C, and Java adds memory management and bytecode to C++, but as a result, loses efficiency and the ability for low-level manipulation). 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. Computer programmers are those who write computer software. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. Techniques like Code refactoring can enhance readability. 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.