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. Use of a static code analysis tool can help detect some possible problems. These compiled languages allow the programmer to write programs in terms that are syntactically richer, and more capable of abstracting the code, making it easy to target varying machine instruction sets via compilation declarations and heuristics. 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). 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. 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. These compiled languages allow the programmer to write programs in terms that are syntactically richer, and more capable of abstracting the code, making it easy to target varying machine instruction sets via compilation declarations and heuristics. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process. Scripting and breakpointing is also part of this process. 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. Normally the first step in debugging is to attempt to reproduce the problem. Code-breaking algorithms have also existed for centuries. Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications. Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users. Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability. Whatever the approach to development may be, the final program must satisfy some fundamental properties. For this purpose, algorithms are classified into orders using so-called Big O notation, which expresses resource use, such as execution time or memory consumption, in terms of the size of an input. There are many approaches to the Software development process. It is usually easier to code in "high-level" languages than in "low-level" ones. Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA). It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages. The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging). Programmable devices have existed for centuries.