Scripting and breakpointing is also part of this process. Programmable devices have existed for centuries. Techniques like Code refactoring can enhance readability. Computer programmers are those who write computer software. Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability. Different programming languages support different styles of programming (called programming paradigms). 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). Normally the first step in debugging is to attempt to reproduce the problem. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. 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. Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA). Readability is important because programmers spend the majority of their time reading, trying to understand, reusing and modifying existing source code, rather than writing new source code. However, readability is more than just programming style. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. There exist a lot of different approaches for each of those tasks. Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. 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. It affects the aspects of quality above, including portability, usability and most importantly maintainability. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. 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. Languages form an approximate spectrum from "low-level" to "high-level"; "low-level" languages are typically more machine-oriented and faster to execute, whereas "high-level" languages are more abstract and easier to use but execute less quickly. Methods of measuring programming language popularity include: counting the number of job advertisements that mention the language, the number of books sold and courses teaching the language (this overestimates the importance of newer languages), and estimates of the number of existing lines of code written in the language (this underestimates the number of users of business languages such as COBOL). Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation. Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation.