Scripting and breakpointing is also part of this process. In 1206, the Arab engineer Al-Jazari invented a programmable drum machine where a musical mechanical automaton could be made to play different rhythms and drum patterns, via pegs and cams. The academic field and the engineering practice of computer programming are both largely concerned with discovering and implementing the most efficient algorithms for a given class of problems. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process. The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging). This can be a non-trivial task, for example as with parallel processes or some unusual software bugs. This can be a non-trivial task, for example as with parallel processes or some unusual software bugs. The choice of language used is subject to many considerations, such as company policy, suitability to task, availability of third-party packages, or individual preference. 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. However, readability is more than just programming style. Programmable devices have existed for centuries. 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. Many applications use a mix of several languages in their construction and use. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. One approach popular for requirements analysis is Use Case analysis. However, Charles Babbage had already written his first program for the Analytical Engine in 1837. 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. 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. The academic field and the engineering practice of computer programming are both largely concerned with discovering and implementing the most efficient algorithms for a given class of problems. 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. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.