Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process. One approach popular for requirements analysis is Use Case analysis. Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment. 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. In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages. Assembly languages were soon developed that let the programmer specify instruction in a text format (e.g., ADD X, TOTAL), with abbreviations for each operation code and meaningful names for specifying addresses. Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards. In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages. 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. Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment. Following a consistent programming style often helps readability. Many applications use a mix of several languages in their construction and use. 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. Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists. They are the building blocks for all software, from the simplest applications to the most sophisticated ones. Provided the functions in a library follow the appropriate run-time conventions (e.g., method of passing arguments), then these functions may be written in any other language. However, because an assembly language is little more than a different notation for a machine language, two machines with different instruction sets also have different assembly languages. In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them. As early as the 9th century, a programmable music sequencer was invented by the Persian Banu Musa brothers, who described an automated mechanical flute player in the Book of Ingenious Devices. It is very difficult to determine what are the most popular modern programming languages. One approach popular for requirements analysis is Use Case analysis. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. 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. In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form. Trade-offs from this ideal involve finding enough programmers who know the language to build a team, the availability of compilers for that language, and the efficiency with which programs written in a given language execute.