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. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. Different programming languages support different styles of programming (called programming paradigms). Also, specific user environment and usage history can make it difficult to reproduce the problem. Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards. 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. Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications. 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. Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications. 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. This can be a non-trivial task, for example as with parallel processes or some unusual software bugs. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. This can be a non-trivial task, for example as with parallel processes or some unusual software bugs. The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA. It is usually easier to code in "high-level" languages than in "low-level" ones. Different programming languages support different styles of programming (called programming paradigms). Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards. The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA. Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment. Use of a static code analysis tool can help detect some possible problems. Scripting and breakpointing is also part of this process. There are many approaches to the Software development process. In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form. In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them. 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).