Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit. Scripting and breakpointing is also part of this process. Scripting and breakpointing is also part of this process. The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). Normally the first step in debugging is to attempt to reproduce the problem. Programming languages are essential for software development. 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. 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. They are the building blocks for all software, from the simplest applications to the most sophisticated ones. Scripting and breakpointing is also part of this process. In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form. It is very difficult to determine what are the most popular modern programming languages. Computer programmers are those who write computer software. Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit. 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. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. Techniques like Code refactoring can enhance readability. 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. The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'. 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. Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability. 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.