After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug. 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. Following a consistent programming style often helps readability. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). Ideally, the programming language best suited for the task at hand will be selected. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). Computer programmers are those who write computer software. Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment. 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. However, readability is more than just programming style. 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). 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. 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. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. It is very difficult to determine what are the most popular modern programming languages. Programs were mostly entered using punched cards or paper tape. One approach popular for requirements analysis is Use Case analysis. 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. 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. One approach popular for requirements analysis is Use Case analysis. 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. Also, specific user environment and usage history can make it difficult to reproduce the problem. A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it. 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.