Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation. Techniques like Code refactoring can enhance readability. Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation. Computer programmers are those who write computer software. By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers. 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. Techniques like Code refactoring can enhance readability. Some languages are more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages. Code-breaking algorithms have also existed for centuries. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. FORTRAN, the first widely used high-level language to have a functional implementation, came out in 1957, and many other languages were soon developed—in particular, COBOL aimed at commercial data processing, and Lisp for computer research. Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA). While these are sometimes considered programming, often the term software development is used for this larger overall process – with the terms programming, implementation, and coding reserved for the writing and editing of code per se. Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation. While these are sometimes considered programming, often the term software development is used for this larger overall process – with the terms programming, implementation, and coding reserved for the writing and editing of code per se. Whatever the approach to development may be, the final program must satisfy some fundamental properties. 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. Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards. Proficient programming usually requires expertise in several different subjects, including knowledge of the application domain, details of programming languages and generic code libraries, specialized algorithms, and formal logic. It affects the aspects of quality above, including portability, usability and most importantly maintainability. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. 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. Integrated development environments (IDEs) aim to integrate all such help. Different programming languages support different styles of programming (called programming paradigms).