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. 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. However, readability is more than just programming style. Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards. In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form. In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form. 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. It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages. It is very difficult to determine what are the most popular modern programming languages. It is usually easier to code in "high-level" languages than in "low-level" ones. However, Charles Babbage had already written his first program for the Analytical Engine in 1837. Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation. By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers. Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. Programmable devices have existed for centuries. Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users. Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA). He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them. Various visual programming languages have also been developed with the intent to resolve readability concerns by adopting non-traditional approaches to code structure and display. 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. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). Programs were mostly entered using punched cards or paper tape.