Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications. 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. Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation. They are the building blocks for all software, from the simplest applications to the most sophisticated ones. Many applications use a mix of several languages in their construction and use. Expert programmers are familiar with a variety of well-established algorithms and their respective complexities and use this knowledge to choose algorithms that are best suited to the circumstances. Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment. It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages. 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. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. Programmable devices have existed for centuries. Code-breaking algorithms have also existed for centuries. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process. Different programming languages support different styles of programming (called programming paradigms). They are the building blocks for all software, from the simplest applications to the most sophisticated ones. It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming 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. They are the building blocks for all software, from the simplest applications to the most sophisticated ones. The following properties are among the most important: In computer programming, readability refers to the ease with which a human reader can comprehend the purpose, control flow, and operation of source code. Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards. A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. 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.