Ideally, the programming language best suited for the task at hand will be selected..  
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.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
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.  
 Following a consistent programming style often helps readability.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
 Programs were mostly entered using punched cards or paper tape.  
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.  
However, readability is more than just programming style.  
Techniques like Code refactoring can enhance readability.  
Trade-offs from this ideal involve finding enough programmers who know the language to build a team, the availability of compilers for that language, and the efficiency with which programs written in a given language execute.  
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.  
In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages.  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.