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..  
 Allen Downey, in his book How To Think Like A Computer Scientist, writes:  
 Many computer languages provide a mechanism to call functions provided by shared libraries.  
 Code-breaking algorithms have also existed for centuries.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
 These compiled languages allow the programmer to write programs in terms that are syntactically richer, and more capable of abstracting the code, making it easy to target varying machine instruction sets via compilation declarations and heuristics.  
There are many approaches to the Software development process.  
One approach popular for requirements analysis is Use Case analysis.  
 It is very difficult to determine what are the most popular modern programming languages.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
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.  
 Programs were mostly entered using punched cards or paper tape.