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.  
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.  
There are many approaches to the Software development process.  
Compiling takes the source code from a low-level programming language and converts it into machine code.  
To produce machine code, the source code must either be compiled or transpiled.  
The source code of a program is written in one or more languages that are intelligible to programmers, rather than machine code, which is directly executed by the central processing unit.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
Programming languages are essential for software development.  
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.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
When debugging the problem in a GUI, the programmer can try to skip some user interaction from the original problem description and check if remaining actions are sufficient for bugs to appear.  
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.  
Provided the functions in a library follow the appropriate run-time conventions (e.g., method of passing arguments), then these functions may be written in any other language.  
For example, COBOL is still strong in corporate data centers often on large mainframe computers, Fortran in engineering applications, scripting languages in Web development, and C in embedded software.