High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware..  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
 Programmable devices have existed for centuries.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
Scripting and breakpointing is also part of this process.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
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.  
There are many approaches to the Software development process.  
  
The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
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.  
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.