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.  
Some of these factors include:  
 The presentation aspects of this (such as indents, line breaks, color highlighting, and so on) are often handled by the source code editor, but the content aspects reflect the programmer's talent and skills.  
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.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
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.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
Many applications use a mix of several languages in their construction and use.  
For example, when a bug in a compiler can make it crash when parsing some large source file, a simplification of the test case that results in only few lines from the original source file can be sufficient to reproduce the same crash.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
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.  
Many programmers use forms of Agile software development where the various stages of formal software development are more integrated together into short cycles that take a few weeks rather than years.