He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm..  
 Code-breaking algorithms have also existed for centuries.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
 Various visual programming languages have also been developed with the intent to resolve readability concerns by adopting non-traditional approaches to code structure and display.  
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.  
One approach popular for requirements analysis is Use Case analysis.  
 Following a consistent programming style often helps readability.  
Proficient programming usually requires expertise in several different subjects, including knowledge of the application domain, details of programming languages and generic code libraries, specialized algorithms, and formal logic.  
 The academic field and the engineering practice of computer programming are both largely concerned with discovering and implementing the most efficient algorithms for a given class of problems.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
Many applications use a mix of several languages in their construction and use.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.