He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm..  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
The following properties are among the most important:  
  
 In computer programming, readability refers to the ease with which a human reader can comprehend the purpose, control flow, and operation of source code.  
Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit.  
Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation.  
 Code-breaking algorithms have also existed for centuries.  
 Debugging is often done with IDEs. Standalone debuggers like GDB are also used, and these often provide less of a visual environment, usually using a command line.  
Normally the first step in debugging is to attempt to reproduce the problem.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
 Different programming languages support different styles of programming (called programming paradigms).  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
Their jobs usually involve:  
 Although programming has been presented in the media as a somewhat mathematical subject, some research shows that good programmers have strong skills in natural human languages, and that learning to code is similar to learning a foreign language.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.