He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm..  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
Programming languages are essential for software development.  
Many applications use a mix of several languages in their construction and use.  
Integrated development environments (IDEs) aim to integrate all such help.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
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.  
 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.  
There exist a lot of different approaches for each of those tasks.  
 Readability is important because programmers spend the majority of their time reading, trying to understand, reusing and modifying existing source code, rather than writing new source code.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
However, readability is more than just programming style.  
There are many approaches to the Software development process.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.