After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug..  
There are many approaches to the Software development process.  
 Code-breaking algorithms have also existed for centuries.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
However, readability is more than just programming style.  
 Programs were mostly entered using punched cards or paper tape.  
Integrated development environments (IDEs) aim to integrate all such help.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
Later a control panel (plug board) added to his 1906 Type I Tabulator allowed it to be programmed for different jobs, and by the late 1940s, unit record equipment such as the IBM 602 and IBM 604, were programmed by control panels in a similar way, as were the first electronic computers.  
Languages form an approximate spectrum from "low-level" to "high-level"; "low-level" languages are typically more machine-oriented and faster to execute, whereas "high-level" languages are more abstract and easier to use but execute less quickly.  
 These compiled languages allow the programmer to write programs in terms that are syntactically richer, and more capable of abstracting the code, making it easy to target varying machine instruction sets via compilation declarations and heuristics.  
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.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
Use of a static code analysis tool can help detect some possible problems.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).