Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists..  
 In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
However, readability is more than just programming style.  
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.  
  
 Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
 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.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
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.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
However, with the concept of the stored-program computer introduced in 1949, both programs and data were stored and manipulated in the same way in computer memory.  
  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.