Use of a static code analysis tool can help detect some possible problems.  
Relatedly, software engineering combines engineering techniques and principles with software development.  
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.  
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Ideally, the programming language best suited for the task at hand will be selected.  
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.  
For this purpose, algorithms are classified into orders using so-called Big O notation, which expresses resource use, such as execution time or memory consumption, in terms of the size of an input.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
However, readability is more than just programming style.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
For this purpose, algorithms are classified into orders using so-called Big O notation, which expresses resource use, such as execution time or memory consumption, in terms of the size of an input.  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
Many applications use a mix of several languages in their construction and use.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
The source code of a program is written in one or more languages that are intelligible to programmers, rather than machine code, which is directly executed by the central processing unit.