For example, when a bug in a compiler can make it crash when parsing some large source file, a simplification of the test case that results in only few lines from the original source file can be sufficient to reproduce the same crash.  
Some languages are more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages.  
Transpiling on the other hand, takes the source-code from a high-level programming language and converts it into bytecode.  
The purpose of programming is to find a sequence of instructions that will automate the performance of a task (which can be as complex as an operating system) on a computer, often for solving a given problem.  
Relatedly, software engineering combines engineering techniques and principles with software development.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
The purpose of programming is to find a sequence of instructions that will automate the performance of a task (which can be as complex as an operating system) on a computer, often for solving a given problem.  
Scripting and breakpointing is also part of this process.  
There are many approaches to the Software development process.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
One approach popular for requirements analysis is Use Case analysis.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.