Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process..  
Many applications use a mix of several languages in their construction and use.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
Ideally, the programming language best suited for the task at hand will be selected.  
 The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging).  
Assembly languages were soon developed that let the programmer specify instruction in a text format (e.g., ADD X, TOTAL), with abbreviations for each operation code and meaningful names for specifying addresses.  
  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.  
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.  
There are many approaches to the Software development process.  
One approach popular for requirements analysis is Use Case analysis.  
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.  
Programming languages are essential for software development.  
Use of a static code analysis tool can help detect some possible problems.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.