The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging)..  
However, readability is more than just programming style.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
 Computer programmers are those who write computer software.  
 Different programming languages support different styles of programming (called programming paradigms).  
Their jobs usually involve:  
 Although programming has been presented in the media as a somewhat mathematical subject, some research shows that good programmers have strong skills in natural human languages, and that learning to code is similar to learning a foreign language.  
 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.  
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.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
 It is very difficult to determine what are the most popular modern programming languages.  
However, because an assembly language is little more than a different notation for a machine language, two machines with different instruction sets also have different assembly languages.  
Many applications use a mix of several languages in their construction and use.  
Many programmers use forms of Agile software development where the various stages of formal software development are more integrated together into short cycles that take a few weeks rather than years.  
Normally the first step in debugging is to attempt to reproduce the problem.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).