Computer programmers are those who write computer software..  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
The choice of language used is subject to many considerations, such as company policy, suitability to task, availability of third-party packages, or individual preference.  
 Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.  
Use of a static code analysis tool can help detect some possible problems.  
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.  
Expert programmers are familiar with a variety of well-established algorithms and their respective complexities and use this knowledge to choose algorithms that are best suited to the circumstances.  
 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.  
  
 Programmable devices have existed for centuries.  
Programming languages are essential for software development.  
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.  
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.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.