They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
There are many approaches to the Software development process.  
Normally the first step in debugging is to attempt to reproduce the problem.  
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.  
Ideally, the programming language best suited for the task at hand will be selected.  
Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability.  
Trade-offs from this ideal involve finding enough programmers who know the language to build a team, the availability of compilers for that language, and the efficiency with which programs written in a given language execute.  
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.  
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.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
Use of a static code analysis tool can help detect some possible problems.  
Use of a static code analysis tool can help detect some possible problems.  
Compiling takes the source code from a low-level programming language and converts it into machine code.  
It is usually easier to code in "high-level" languages than in "low-level" ones.