The first computer program is generally dated to 1843, when mathematician Ada Lovelace published an algorithm to calculate a sequence of Bernoulli numbers, intended to be carried out by Charles Babbage's Analytical Engine..  
 Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.  
 Readability is important because programmers spend the majority of their time reading, trying to understand, reusing and modifying existing source code, rather than writing new source code.  
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.  
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.  
 It is very difficult to determine what are the most popular modern programming languages.  
Use of a static code analysis tool can help detect some possible problems.  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
Many applications use a mix of several languages in their construction and use.  
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).  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
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.  
Later a control panel (plug board) added to his 1906 Type I Tabulator allowed it to be programmed for different jobs, and by the late 1940s, unit record equipment such as the IBM 602 and IBM 604, were programmed by control panels in a similar way, as were the first electronic computers.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.