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..  
There exist a lot of different approaches for each of those tasks.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
 Auxiliary tasks accompanying and related to programming include analyzing requirements, testing, debugging (investigating and fixing problems), implementation of build systems, and management of derived artifacts, such as programs' machine code.  
Techniques like Code refactoring can enhance readability.  
However, readability is more than just programming style.  
 It is very difficult to determine what are the most popular modern programming languages.  
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.  
Methods of measuring programming language popularity include: counting the number of job advertisements that mention the language, the number of books sold and courses teaching the language (this overestimates the importance of newer languages), and estimates of the number of existing lines of code written in the language (this underestimates the number of users of business languages such as COBOL).  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
 Computer programmers are those who write computer software.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
 In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form.  
 Debugging is often done with IDEs. Standalone debuggers like GDB are also used, and these often provide less of a visual environment, usually using a command line.  
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.