They are the building blocks for all software, from the simplest applications to the most sophisticated ones..  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
 Various visual programming languages have also been developed with the intent to resolve readability concerns by adopting non-traditional approaches to code structure and display.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
For example, COBOL is still strong in corporate data centers often on large mainframe computers, Fortran in engineering applications, scripting languages in Web development, and C in embedded software.  
 In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
Ideally, the programming language best suited for the task at hand will be selected.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
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.  
 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.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.