In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them..  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
 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.  
 Programmable devices have existed for centuries.  
Normally the first step in debugging is to attempt to reproduce the problem.  
Provided the functions in a library follow the appropriate run-time conventions (e.g., method of passing arguments), then these functions may be written in any other language.  
  
 Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks.  
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.  
Programming languages are essential for software development.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
 Following a consistent programming style often helps readability.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
 Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.