Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit..  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.  
 Different programming languages support different styles of programming (called programming paradigms).  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
 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.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
 The academic field and the engineering practice of computer programming are both largely concerned with discovering and implementing the most efficient algorithms for a given class of problems.  
There exist a lot of different approaches for each of those tasks.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
  
The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.  
 Programs were mostly entered using punched cards or paper tape.  
When debugging the problem in a GUI, the programmer can try to skip some user interaction from the original problem description and check if remaining actions are sufficient for bugs to appear.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.