Whatever the approach to development may be, the final program must satisfy some fundamental properties..  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
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.  
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.  
 Code-breaking algorithms have also existed for centuries.  
FORTRAN, the first widely used high-level language to have a functional implementation, came out in 1957, and many other languages were soon developed—in particular, COBOL aimed at commercial data processing, and Lisp for computer research.  
In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
Scripting and breakpointing is also part of this process.  
  
Normally the first step in debugging is to attempt to reproduce the problem.  
 Programs were mostly entered using punched cards or paper tape.  
 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.