By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers..  
Integrated development environments (IDEs) aim to integrate all such help.  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
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.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
Scripting and breakpointing is also part of this process.  
 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.  
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.  
Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists.  
 Following a consistent programming style often helps readability.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
 Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.