Programmable devices have existed for centuries..  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.  
 The first computer program is generally dated to 1843, when mathematician Ada Lovelace published an algorithm to calculate a sequence of Bernoulli numbers, intended to be carried out by Charles Babbage's Analytical Engine.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
Programming languages are essential for software development.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
Integrated development environments (IDEs) aim to integrate all such help.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
Ideally, the programming language best suited for the task at hand will be selected.  
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.  
The following properties are among the most important:  
  
 In computer programming, readability refers to the ease with which a human reader can comprehend the purpose, control flow, and operation of source code.  
 Different programming languages support different styles of programming (called programming paradigms).  
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.