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..  
Some languages are more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
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.  
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.  
 Programmable devices have existed for centuries.  
 Following a consistent programming style often helps readability.  
 The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging).  
In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages.  
Ideally, the programming language best suited for the task at hand will be selected.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
There exist a lot of different approaches for each of those tasks.  
 It is very difficult to determine what are the most popular modern programming languages.  
Many programmers use forms of Agile software development where the various stages of formal software development are more integrated together into short cycles that take a few weeks rather than years.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.