Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages..  
 Computer programmers are those who write computer software.  
 Code-breaking algorithms have also existed for centuries.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
Use of a static code analysis tool can help detect some possible problems.  
 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.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
For example, COBOL is still strong in corporate data centers often on large mainframe computers, Fortran in engineering applications, scripting languages in Web development, and C in embedded software.  
While these are sometimes considered programming, often the term software development is used for this larger overall process – with the terms programming, implementation, and coding reserved for the writing and editing of code per se.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
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.  
Ideally, the programming language best suited for the task at hand will be selected.