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..  
Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
Languages form an approximate spectrum from "low-level" to "high-level"; "low-level" languages are typically more machine-oriented and faster to execute, whereas "high-level" languages are more abstract and easier to use but execute less quickly.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
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.  
Many applications use a mix of several languages in their construction and use.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
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.