However, because an assembly language is little more than a different notation for a machine language, two machines with different instruction sets also have different assembly languages..  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
 Different programming languages support different styles of programming (called programming paradigms).  
Programming languages are essential for software development.  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
As early as the 9th century, a programmable music sequencer was invented by the Persian Banu Musa brothers, who described an automated mechanical flute player in the Book of Ingenious Devices.  
 In the 1880s, Herman Hollerith invented the concept of storing data in machine-readable form.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
Many applications use a mix of several languages in their construction and use.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
 These compiled languages allow the programmer to write programs in terms that are syntactically richer, and more capable of abstracting the code, making it easy to target varying machine instruction sets via compilation declarations and heuristics.  
  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
  
 Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks.