In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
Integrated development environments (IDEs) aim to integrate all such help.  
For example, when a bug in a compiler can make it crash when parsing some large source file, a simplification of the test case that results in only few lines from the original source file can be sufficient to reproduce the same crash.  
FORTRAN, the first widely used high-level language to have a functional implementation, came out in 1957, and many other languages were soon developed—in particular, COBOL aimed at commercial data processing, and Lisp for computer research.  
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.  
Programming languages are essential for software development.  
Transpiling on the other hand, takes the source-code from a high-level programming language and converts it into bytecode.  
However, readability is more than just programming style.  
To produce machine code, the source code must either be compiled or transpiled.  
Ideally, the programming language best suited for the task at hand will be selected.  
There are many approaches to the Software development process.  
  
 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.  
Integrated development environments (IDEs) aim to integrate all such help.  
  
The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.