This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
Later a control panel (plug board) added to his 1906 Type I Tabulator allowed it to be programmed for different jobs, and by the late 1940s, unit record equipment such as the IBM 602 and IBM 604, were programmed by control panels in a similar way, as were the first electronic computers.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
Ideally, the programming language best suited for the task at hand will be selected.  
Trade-offs from this ideal involve finding enough programmers who know the language to build a team, the availability of compilers for that language, and the efficiency with which programs written in a given language execute.  
Programming involves tasks such as analysis, generating algorithms, profiling algorithms' accuracy and resource consumption, and the implementation of algorithms (usually in a particular programming language, commonly referred to as coding).  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
There are many approaches to the Software development process.  
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.  
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.  
There are many approaches to the Software development process.  
Relatedly, software engineering combines engineering techniques and principles with software development.  
  
The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.  
  
 Computer programming is the process of performing particular computations (or more generally, accomplishing specific computing results), usually by designing and building executable computer programs.  
Ideally, the programming language best suited for the task at hand will be selected.