However, with the concept of the stored-program computer introduced in 1949, both programs and data were stored and manipulated in the same way in computer memory..  
Use of a static code analysis tool can help detect some possible problems.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
Normally the first step in debugging is to attempt to reproduce the problem.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
 Programmable devices have existed for centuries.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
However, readability is more than just programming style.  
 The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging).  
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.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
Programming languages are essential for software development.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.