A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it..  
There exist a lot of different approaches for each of those tasks.  
 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.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
 Following a consistent programming style often helps readability.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability.  
Methods of measuring programming language popularity include: counting the number of job advertisements that mention the language, the number of books sold and courses teaching the language (this overestimates the importance of newer languages), and estimates of the number of existing lines of code written in the language (this underestimates the number of users of business languages such as COBOL).  
 The academic field and the engineering practice of computer programming are both largely concerned with discovering and implementing the most efficient algorithms for a given class of problems.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
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.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.