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)..  
 It is very difficult to determine what are the most popular modern programming languages.  
 Different programming languages support different styles of programming (called programming paradigms).  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit.  
 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.  
The choice of language used is subject to many considerations, such as company policy, suitability to task, availability of third-party packages, or individual preference.  
 Computer programmers are those who write computer software.  
Ideally, the programming language best suited for the task at hand will be selected.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
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.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
Integrated development environments (IDEs) aim to integrate all such help.  
Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.