Scripting and breakpointing is also part of this process..  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
One approach popular for requirements analysis is Use Case analysis.  
Expert programmers are familiar with a variety of well-established algorithms and their respective complexities and use this knowledge to choose algorithms that are best suited to the circumstances.  
Some of these factors include:  
 The presentation aspects of this (such as indents, line breaks, color highlighting, and so on) are often handled by the source code editor, but the content aspects reflect the programmer's talent and skills.  
  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.  
Many programmers use forms of Agile software development where the various stages of formal software development are more integrated together into short cycles that take a few weeks rather than years.  
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.  
For this purpose, algorithms are classified into orders using so-called Big O notation, which expresses resource use, such as execution time or memory consumption, in terms of the size of an input.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
 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 more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages.  
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).