While these are sometimes considered programming, often the term software development is used for this larger overall process – with the terms programming, implementation, and coding reserved for the writing and editing of code per se. Programming languages are essential for software development. It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages. Ideally, the programming language best suited for the task at hand will be selected. However, readability is more than just programming style. Code-breaking algorithms have also existed for centuries. In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications. One approach popular for requirements analysis is Use Case analysis. Languages form an approximate spectrum from "low-level" to "high-level"; "low-level" languages are typically more machine-oriented and faster to execute, whereas "high-level" languages are more abstract and easier to use but execute less quickly. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process. 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. Integrated development environments (IDEs) aim to integrate all such help. Techniques like Code refactoring can enhance readability. Programming languages are essential for software development. 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. Ideally, the programming language best suited for the task at hand will be selected. A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it. 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. Also, specific user environment and usage history can make it difficult to reproduce the problem. 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. In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages. Computer programmers are those who write computer software. 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.