The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. 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. Trade-offs from this ideal involve finding enough programmers who know the language to build a team, the availability of compilers for that language, and the efficiency with which programs written in a given language execute. It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages. There exist a lot of different approaches for each of those tasks. Different programming languages support different styles of programming (called programming paradigms). It affects the aspects of quality above, including portability, usability and most importantly maintainability. Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process. Whatever the approach to development may be, the final program must satisfy some fundamental properties. Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). Scripting and breakpointing is also part of this process. However, readability is more than just programming style. Auxiliary tasks accompanying and related to programming include analyzing requirements, testing, debugging (investigating and fixing problems), implementation of build systems, and management of derived artifacts, such as programs' machine code. 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. Following a consistent programming style often helps readability. The following properties are among the most important: In computer programming, readability refers to the ease with which a human reader can comprehend the purpose, control flow, and operation of source code. In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages. This can be a non-trivial task, for example as with parallel processes or some unusual software bugs. Auxiliary tasks accompanying and related to programming include analyzing requirements, testing, debugging (investigating and fixing problems), implementation of build systems, and management of derived artifacts, such as programs' machine code. The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.