Ideally, the programming language best suited for the task at hand will be selected. 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. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). When debugging the problem in a GUI, the programmer can try to skip some user interaction from the original problem description and check if remaining actions are sufficient for bugs to appear. 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. Unreadable code often leads to bugs, inefficiencies, and duplicated code. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. Integrated development environments (IDEs) aim to integrate all such help. By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. 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. Programming languages are essential for software development. 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. For example, COBOL is still strong in corporate data centers often on large mainframe computers, Fortran in engineering applications, scripting languages in Web development, and C in embedded software. 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. One approach popular for requirements analysis is Use Case analysis. 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. Ideally, the programming language best suited for the task at hand will be selected. 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. Scripting and breakpointing is also part of this process. Many applications use a mix of several languages in their construction and use. New languages are generally designed around the syntax of a prior language with new functionality added, (for example C++ adds object-orientation to C, and Java adds memory management and bytecode to C++, but as a result, loses efficiency and the ability for low-level manipulation). The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging). Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.