

Ideally, the programming language best suited for the task at hand will be selected. Scripting and breakpointing is also part of this process. Debugging is often done with IDEs. Standalone debuggers like GDB are also used, and these often provide less of a visual environment, usually using a command line. Whatever the approach to development may be, the final program must satisfy some fundamental properties. Also, specific user environment and usage history can make it difficult to reproduce the problem. 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. 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. Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. 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. Scripting and breakpointing is also part of this process. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. Scripting and breakpointing is also part of this process. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. Ideally, the programming language best suited for the task at hand will be selected. 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. The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'. The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'. Also, specific user environment and usage history can make it difficult to reproduce the problem. 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. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). 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. 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. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). It is usually easier to code in "high-level" languages than in "low-level" ones.