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. Provided the functions in a library follow the appropriate run-time conventions (e.g., method of passing arguments), then these functions may be written in any other language. Allen Downey, in his book How To Think Like A Computer Scientist, writes: Many computer languages provide a mechanism to call functions provided by shared libraries. 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. Techniques like Code refactoring can enhance readability. Ideally, the programming language best suited for the task at hand will be selected. After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug. 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. Their jobs usually involve: Although programming has been presented in the media as a somewhat mathematical subject, some research shows that good programmers have strong skills in natural human languages, and that learning to code is similar to learning a foreign language. Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation. A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it. The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'. It is very difficult to determine what are the most popular modern programming languages. 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. Integrated development environments (IDEs) aim to integrate all such help. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling). 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. Various visual programming languages have also been developed with the intent to resolve readability concerns by adopting non-traditional approaches to code structure and display. Use of a static code analysis tool can help detect some possible problems. 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. Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications. 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. It is very difficult to determine what are the most popular modern programming languages. Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.