Use of a static code analysis tool can help detect some possible problems. It is very difficult to determine what are the most popular modern programming languages. Different programming languages support different styles of programming (called programming paradigms). It is usually easier to code in "high-level" languages than in "low-level" ones. 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. 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, 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. Many applications use a mix of several languages in their construction and use. Use of a static code analysis tool can help detect some possible problems. Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them. Techniques like Code refactoring can enhance readability. 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. Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards. There are many approaches to the Software development process. The first computer program is generally dated to 1843, when mathematician Ada Lovelace published an algorithm to calculate a sequence of Bernoulli numbers, intended to be carried out by Charles Babbage's Analytical Engine. 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. Programs were mostly entered using punched cards or paper tape. Programming languages are essential for software development. Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment. Ideally, the programming language best suited for the task at hand will be selected. Unreadable code often leads to bugs, inefficiencies, and duplicated code. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. There exist a lot of different approaches for each of those tasks.