Use of a static code analysis tool can help detect some possible problems. Use of a static code analysis tool can help detect some possible problems. 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. Programming languages are essential for software development. Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability. Code-breaking algorithms have also existed for centuries. Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation. Readability is important because programmers spend the majority of their time reading, trying to understand, reusing and modifying existing source code, rather than writing new source code. In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them. It affects the aspects of quality above, including portability, usability and most importantly maintainability. Programs were mostly entered using punched cards or paper tape. Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards. The academic field and the engineering practice of computer programming are both largely concerned with discovering and implementing the most efficient algorithms for a given class of problems. Also, specific user environment and usage history can make it difficult to reproduce the problem. Also, specific user environment and usage history can make it difficult to reproduce the problem. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. Later a control panel (plug board) added to his 1906 Type I Tabulator allowed it to be programmed for different jobs, and by the late 1940s, unit record equipment such as the IBM 602 and IBM 604, were programmed by control panels in a similar way, as were the first electronic computers. 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. It is usually easier to code in "high-level" languages than in "low-level" ones. 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. Computer programmers are those who write computer software. Normally the first step in debugging is to attempt 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. Techniques like Code refactoring can enhance readability. Many programmers use forms of Agile software development where the various stages of formal software development are more integrated together into short cycles that take a few weeks rather than years.