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. It is very difficult to determine what are the most popular modern programming languages. However, readability is more than just programming style. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. Some languages are more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages. Assembly languages were soon developed that let the programmer specify instruction in a text format (e.g., ADD X, TOTAL), with abbreviations for each operation code and meaningful names for specifying addresses. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. They are the building blocks for all software, from the simplest applications to the most sophisticated ones.

Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists. Programs were mostly entered using punched cards or paper tape. Techniques like Code refactoring can enhance readability. 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.

Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists. Following a consistent programming style often helps readability. There are many approaches to the Software development process.

Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists. 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. There exist a lot of different approaches for each of those tasks. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process. Some languages are more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages. In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them. Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA). Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists. 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.