For this purpose, algorithms are classified into orders using so-called Big O notation, which expresses resource use, such as execution time or memory consumption, in terms of the size of an input..  
 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.  
Techniques like Code refactoring can enhance readability.  
 Auxiliary tasks accompanying and related to programming include analyzing requirements, testing, debugging (investigating and fixing problems), implementation of build systems, and management of derived artifacts, such as programs' machine code.  
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.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
Integrated development environments (IDEs) aim to integrate all such help.  
 Whatever the approach to development may be, the final program must satisfy some fundamental properties.  
In 1206, the Arab engineer Al-Jazari invented a programmable drum machine where a musical mechanical automaton could be made to play different rhythms and drum patterns, via pegs and cams.  
 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.  
 Code-breaking algorithms have also existed for centuries.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
Many applications use a mix of several languages in their construction and use.  
There exist a lot of different approaches for each of those tasks.