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..  
Use of a static code analysis tool can help detect some possible problems.  
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.  
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.  
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.  
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.  
  
 Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
Ideally, the programming language best suited for the task at hand will be selected.  
 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.  
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.  
 It is very difficult to determine what are the most popular modern programming languages.  
Many applications use a mix of several languages in their construction and use.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.