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.  
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.  
FORTRAN, the first widely used high-level language to have a functional implementation, came out in 1957, and many other languages were soon developed—in particular, COBOL aimed at commercial data processing, and Lisp for computer research.  
Also, those involved with software development may at times engage in reverse engineering, which is the practice of seeking to understand an existing program so as to re-implement its function in some way.  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
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.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
Integrated development environments (IDEs) aim to integrate all such help.  
 Following a consistent programming style often helps readability.  
There exist a lot of different approaches for each of those tasks.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
Some of these factors include:  
 The presentation aspects of this (such as indents, line breaks, color highlighting, and so on) are often handled by the source code editor, but the content aspects reflect the programmer's talent and skills.  
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 is very difficult to determine what are the most popular modern programming languages.  
They are the building blocks for all software, from the simplest applications to the most sophisticated ones.