There exist a lot of different approaches for each of those tasks.  
Languages form an approximate spectrum from "low-level" to "high-level"; "low-level" languages are typically more machine-oriented and faster to execute, whereas "high-level" languages are more abstract and easier to use but execute less quickly.  
Proficient programming thus usually requires expertise in several different subjects, including knowledge of the application domain, specialized algorithms, and formal logic.  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
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.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
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 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.  
 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.  
 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.  
 Programmable devices have existed for centuries.  
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.