Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
Many applications use a mix of several languages in their construction and use.  
Use of a static code analysis tool can help detect some possible problems.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
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.  
Ideally, the programming language best suited for the task at hand will be selected.  
The choice of language used is subject to many considerations, such as company policy, suitability to task, availability of third-party packages, or individual preference.  
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.  
Later a control panel (plug board) added to his 1906 Type I Tabulator allowed it to be programmed for different jobs, and by the late 1940s, unit record equipment such as the IBM 602 and IBM 604, were programmed by control panels in a similar way, as were the first electronic computers.  
Scripting and breakpointing is also part of this 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.  
 Programmable devices have existed for centuries.  
Transpiling on the other hand, takes the source-code from a high-level programming language and converts it into bytecode.  
However, with the concept of the stored-program computer introduced in 1949, both programs and data were stored and manipulated in the same way in computer memory.  
 Code-breaking algorithms have also existed for centuries.