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..  
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.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
 Different programming languages support different styles of programming (called programming paradigms).  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
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.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
  
The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.  
Ideally, the programming language best suited for the task at hand will be selected.  
 Computer programmers are those who write computer software.  
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.  
However, readability is more than just programming style.  
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.  
 Programmable devices have existed for centuries.