Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users..  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
  
 Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks.  
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.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
There exist a lot of different approaches for each of those tasks.  
 These compiled languages allow the programmer to write programs in terms that are syntactically richer, and more capable of abstracting the code, making it easy to target varying machine instruction sets via compilation declarations and heuristics.  
Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability.  
Methods of measuring programming language popularity include: counting the number of job advertisements that mention the language, the number of books sold and courses teaching the language (this overestimates the importance of newer languages), and estimates of the number of existing lines of code written in the language (this underestimates the number of users of business languages such as COBOL).  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
 Code-breaking algorithms have also existed for centuries.  
Normally the first step in debugging is to attempt to reproduce the problem.  
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.  
 Computer programmers are those who write computer software.  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.