It is very difficult to determine what are the most popular modern programming languages..  
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.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
Assembly languages were soon developed that let the programmer specify instruction in a text format (e.g., ADD X, TOTAL), with abbreviations for each operation code and meaningful names for specifying addresses.  
 Programmable devices have existed for centuries.  
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.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
 Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.  
 Allen Downey, in his book How To Think Like A Computer Scientist, writes:  
 Many computer languages provide a mechanism to call functions provided by shared libraries.  
  
 Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks.  
There exist a lot of different approaches for each of those tasks.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
 New languages are generally designed around the syntax of a prior language with new functionality added, (for example C++ adds object-orientation to C, and Java adds memory management and bytecode to C++, but as a result, loses efficiency and the ability for low-level manipulation).  
Integrated development environments (IDEs) aim to integrate all such help.