Normally the first step in debugging is to attempt to reproduce the problem.  
Ideally, the programming language best suited for the task at hand will be selected.  
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.  
There are many approaches to the Software development process.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
Relatedly, software engineering combines engineering techniques and principles with software development.  
Transpiling on the other hand, takes the source-code from a high-level programming language and converts it into bytecode.  
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.  
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.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation.  
However, while these might be considered part of the programming process, often the term software development is more likely used for this larger overall process – whereas the terms programming, implementation, and coding tend to be focused on the actual writing of code.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
Proficient programming thus usually requires expertise in several different subjects, including knowledge of the application domain, specialized algorithms, and formal logic.  
 Different programming languages support different styles of programming (called programming paradigms).