There are many approaches to the Software development process.  
To produce machine code, the source code must either be compiled or transpiled.  
Many applications use a mix of several languages in their construction and use.  
The purpose of programming is to find a sequence of instructions that will automate the performance of a task (which can be as complex as an operating system) on a computer, often for solving a given problem.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
This is interpreted into machine code.  
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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.  
Ideally, the programming language best suited for the task at hand will be selected.  
 Various visual programming languages have also been developed with the intent to resolve readability concerns by adopting non-traditional approaches to code structure and display.  
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).  
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Languages form an approximate spectrum from "low-level" to "high-level"; "low-level" languages are typically more machine-oriented and faster to execute, whereas "high-level" languages are more abstract and easier to use but execute less quickly.  
For example, COBOL is still strong in corporate data centers often on large mainframe computers, Fortran in engineering applications, scripting languages in Web development, and C in embedded software.