Programming languages are essential for software development.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
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.  
One approach popular for requirements analysis is Use Case analysis.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
There exist a lot of different approaches for each of those tasks.  
This is interpreted into machine code.  
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Integrated development environments (IDEs) aim to integrate all such help.  
However, because an assembly language is little more than a different notation for a machine language, two machines with different instruction sets also have different assembly languages.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
Some languages are more prone to some kinds of faults because their specification does not require compilers to perform as much checking as other languages.  
 Debugging is often done with IDEs. Standalone debuggers like GDB are also used, and these often provide less of a visual environment, usually using a command line.  
To produce machine code, the source code must either be compiled or transpiled.  
There are many approaches to the Software development process.