Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
Programming involves tasks such as analysis, generating algorithms, profiling algorithms' accuracy and resource consumption, and the implementation of algorithms (usually in a particular programming language, commonly referred to as coding).  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
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.  
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.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
In 1206, the Arab engineer Al-Jazari invented a programmable drum machine where a musical mechanical automaton could be made to play different rhythms and drum patterns, via pegs and cams.  
To produce machine code, the source code must either be compiled or transpiled.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
Ideally, the programming language best suited for the task at hand will be selected.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
This can be a non-trivial task, for example as with parallel processes or some unusual software bugs.  
Integrated development environments (IDEs) aim to integrate all such help.  
Compiling takes the source code from a low-level programming language and converts it into machine code.