It is usually easier to code in "high-level" languages than in "low-level" ones..  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
Provided the functions in a library follow the appropriate run-time conventions (e.g., method of passing arguments), then these functions may be written in any other language.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
 The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging).  
Ideally, the programming language best suited for the task at hand will be selected.  
 After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug.  
Use of a static code analysis tool can help detect some possible problems.  
In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages.  
 Different programming languages support different styles of programming (called programming paradigms).  
As early as the 9th century, a programmable music sequencer was invented by the Persian Banu Musa brothers, who described an automated mechanical flute player in the Book of Ingenious Devices.  
Programming languages are essential for software development.  
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.  
Many applications use a mix of several languages in their construction and use.