The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
Use of a static code analysis tool can help detect some possible problems.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
There exist a lot of different approaches for each of those tasks.  
The source code of a program is written in one or more languages that are intelligible to programmers, rather than machine code, which is directly executed by the central processing unit.  
Ideally, the programming language best suited for the task at hand will be selected.  
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.  
 Readability is important because programmers spend the majority of their time reading, trying to understand, reusing and modifying existing source code, rather than writing new source code.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA).  
Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages.  
 The first computer program is generally dated to 1843, when mathematician Ada Lovelace published an algorithm to calculate a sequence of Bernoulli numbers, intended to be carried out by Charles Babbage's Analytical Engine.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.