Normally the first step in debugging is to attempt to reproduce the problem..  
There exist a lot of different approaches for each of those tasks.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
  
The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
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.  
 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.  
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.  
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.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
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.  
Scripting and breakpointing is also part of this process.  
 Different programming languages support different styles of programming (called programming paradigms).  
However, with the concept of the stored-program computer introduced in 1949, both programs and data were stored and manipulated in the same way in computer memory.