Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment..  
Ideally, the programming language best suited for the task at hand will be selected.  
 Different programming languages support different styles of programming (called programming paradigms).  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
Integrated development environments (IDEs) aim to integrate all such help.  
Also, specific user environment and usage history can make it difficult to reproduce the problem.  
Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation.  
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.  
Techniques like Code refactoring can enhance readability.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.  
Methods of measuring programming language popularity include: counting the number of job advertisements that mention the language, the number of books sold and courses teaching the language (this overestimates the importance of newer languages), and estimates of the number of existing lines of code written in the language (this underestimates the number of users of business languages such as COBOL).  
While these are sometimes considered programming, often the term software development is used for this larger overall process – with the terms programming, implementation, and coding reserved for the writing and editing of code per se.  
 Various visual programming languages have also been developed with the intent to resolve readability concerns by adopting non-traditional approaches to code structure and display.