Integrated development environments (IDEs) aim to integrate all such help..  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
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.  
Text editors were also developed that allowed changes and corrections to be made much more easily than with punched cards.  
There exist a lot of different approaches for each of those tasks.  
 Programs were mostly entered using punched cards or paper tape.  
 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.  
Ideally, the programming language best suited for the task at hand will be selected.  
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.  
 Computer programmers are those who write computer software.  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.  
 Code-breaking algorithms have also existed for centuries.  
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.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
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.