Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks..  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
 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.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
 Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users.  
Integrated development environments (IDEs) aim to integrate all such help.  
Scripting and breakpointing is also part of this process.  
One approach popular for requirements analysis is Use Case analysis.  
Programming languages are essential for software development.  
Trial-and-error/divide-and-conquer is needed: the programmer will try to remove some parts of the original test case and check if the problem still exists.  
 Programmable devices have existed for centuries.  
 Programs were mostly entered using punched cards or paper tape.  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.  
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.