The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging)..  
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.  
  
 Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks.  
There exist a lot of different approaches for each of those tasks.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
Many applications use a mix of several languages in their construction and use.  
 Following a consistent programming style often helps readability.  
FORTRAN, the first widely used high-level language to have a functional implementation, came out in 1957, and many other languages were soon developed—in particular, COBOL aimed at commercial data processing, and Lisp for computer research.  
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.  
Many programmers use forms of Agile software development where the various stages of formal software development are more integrated together into short cycles that take a few weeks rather than years.  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
Expert programmers are familiar with a variety of well-established algorithms and their respective complexities and use this knowledge to choose algorithms that are best suited to the circumstances.  
 Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages.  
 Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (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.