The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'..  
One approach popular for requirements analysis is Use Case analysis.  
Ideally, the programming language best suited for the task at hand will be selected.  
 Auxiliary tasks accompanying and related to programming include analyzing requirements, testing, debugging (investigating and fixing problems), implementation of build systems, and management of derived artifacts, such as programs' machine code.  
Use of a static code analysis tool can help detect some possible problems.  
Some text editors such as Emacs allow GDB to be invoked through them, to provide a visual environment.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
 Programs were mostly entered using punched cards or paper tape.  
 The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging).  
 Computer programmers are those who write computer software.  
Many applications use a mix of several languages in their construction and use.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
 Following a consistent programming style often helps readability.  
  
 Some languages are very popular for particular kinds of applications, while some languages are regularly used to write many different kinds of applications.