Programming languages are essential for software development..  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
 The first step in most formal software development processes is requirements analysis, followed by testing to determine value modeling, implementation, and failure elimination (debugging).  
Scripting and breakpointing is also part of this process.  
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).  
  
Many factors, having little or nothing to do with the ability of the computer to efficiently compile and execute the code, contribute to readability.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
 High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware.  
Unreadable code often leads to bugs, inefficiencies, and duplicated code.  
 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.  
Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process.  
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.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).  
Integrated development environments (IDEs) aim to integrate all such help.