However, with the concept of the stored-program computer introduced in 1949, both programs and data were stored and manipulated in the same way in computer memory.  
By the late 1960s, data storage devices and computer terminals became inexpensive enough that programs could be created by typing directly into the computers.  
A study found that a few simple readability transformations made code shorter and drastically reduced the time to understand it.  
One approach popular for requirements analysis is Use Case analysis.  
Their jobs usually involve:  
 Although programming has been presented in the media as a somewhat mathematical subject, some research shows that good programmers have strong skills in natural human languages, and that learning to code is similar to learning a foreign language.  
Scripting and breakpointing is also part of this process.  
Relatedly, software engineering combines engineering techniques and principles with software development.  
One approach popular for requirements analysis is Use Case analysis.  
It is usually easier to code in "high-level" languages than in "low-level" ones.  
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.  
Techniques like Code refactoring can enhance readability.  
He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm.  
Relatedly, software engineering combines engineering techniques and principles with software development.  
Scripting and breakpointing is also part of this process.  
Trade-offs from this ideal involve finding enough programmers who know the language to build a team, the availability of compilers for that language, and the efficiency with which programs written in a given language execute.