Transpiling on the other hand, takes the source-code from a high-level programming language and converts it into bytecode.  
Normally the first step in debugging is to attempt to reproduce the problem.  
The following properties are among the most important:  
  
 In computer programming, readability refers to the ease with which a human reader can comprehend the purpose, control flow, and operation of source code.  
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).  
For example, when a bug in a compiler can make it crash when parsing some large source file, a simplification of the test case that results in only few lines from the original source file can be sufficient to reproduce the same crash.  
Scripting and breakpointing is also part of this process.  
Normally the first step in debugging is to attempt to reproduce the problem.  
Many applications use a mix of several languages in their construction and use.  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.  
The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA.  
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.  
However, while these might be considered part of the programming process, often the term software development is more likely used for this larger overall process – whereas the terms programming, implementation, and coding tend to be focused on the actual writing of code.  
Use of a static code analysis tool can help detect some possible problems.  
 Different programming languages support different styles of programming (called programming paradigms).  
However, Charles Babbage had already written his first program for the Analytical Engine in 1837.