There exist a lot of different approaches for each of those tasks..  
 Machine code was the language of early programs, written in the instruction set of the particular machine, often in binary notation.  
Many applications use a mix of several languages in their construction and use.  
 It is very difficult to determine what are the most popular modern programming languages.  
Integrated development environments (IDEs) aim to integrate all such help.  
In 1801, the Jacquard loom could produce entirely different weaves by changing the "program" – a series of pasteboard cards with holes punched in them.  
Normally the first step in debugging is to attempt to reproduce the problem.  
Scripting and breakpointing is also part of this process.  
It affects the aspects of quality above, including portability, usability and most importantly maintainability.  
 The first computer program is generally dated to 1843, when mathematician Ada Lovelace published an algorithm to calculate a sequence of Bernoulli numbers, intended to be carried out by Charles Babbage's Analytical Engine.  
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.  
It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages.  
However, because an assembly language is little more than a different notation for a machine language, two machines with different instruction sets also have different assembly languages.  
 Readability is important because programmers spend the majority of their time reading, trying to understand, reusing and modifying existing source code, rather than writing new source code.  
 A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).