Assembly languages were soon developed that let the programmer specify instruction in a text format (e.g., ADD X, TOTAL), with abbreviations for each operation code and meaningful names for specifying addresses. Scripting and breakpointing is also part of this process. 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. Scripting and breakpointing is also part of this process. Provided the functions in a library follow the appropriate run-time conventions (e.g., method of passing arguments), then these functions may be written in any other language. The choice of language used is subject to many considerations, such as company policy, suitability to task, availability of third-party packages, or individual preference. The Unified Modeling Language (UML) is a notation used for both the OOAD and MDA. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. Programs were mostly entered using punched cards or paper tape. 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. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug. Scripting and breakpointing is also part of this process. FORTRAN, the first widely used high-level language to have a functional implementation, came out in 1957, and many other languages were soon developed—in particular, COBOL aimed at commercial data processing, and Lisp for computer research. Programmable devices have existed for centuries. As early as the 9th century, a programmable music sequencer was invented by the Persian Banu Musa brothers, who described an automated mechanical flute player in the Book of Ingenious Devices. Assembly languages were soon developed that let the programmer specify instruction in a text format (e.g., ADD X, TOTAL), with abbreviations for each operation code and meaningful names for specifying addresses. While these are sometimes considered programming, often the term software development is used for this larger overall process – with the terms programming, implementation, and coding reserved for the writing and editing of code per se. It involves designing and implementing algorithms, step-by-step specifications of procedures, by writing code in one or more programming languages. Debugging is often done with IDEs. Standalone debuggers like GDB are also used, and these often provide less of a visual environment, usually using a command line. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. Integrated development environments (IDEs) aim to integrate all such help. Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation. There exist a lot of different approaches for each of those tasks. A similar technique used for database design is Entity-Relationship Modeling (ER Modeling).