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. It is very difficult to determine what are the most popular modern programming languages. Integrated development environments (IDEs) aim to integrate all such help. Various visual programming languages have also been developed with the intent to resolve readability concerns by adopting non-traditional approaches to code structure and display. Scripting and breakpointing is also part of this process. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages. There exist a lot of different approaches for each of those tasks. Programmers typically use high-level programming languages that are more easily intelligible to humans than machine code, which is directly executed by the central processing unit. Normally the first step in debugging is to attempt to reproduce the problem. 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. Computer programming or coding is the composition of sequences of instructions, called programs, that computers can follow to perform tasks. 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. Programming languages are essential for software development. Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA). There are many approaches to the Software development process. 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. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. Popular modeling techniques include Object-Oriented Analysis and Design (OOAD) and Model-Driven Architecture (MDA). Also, specific user environment and usage history can make it difficult to reproduce the problem. However, Charles Babbage had already written his first program for the Analytical Engine in 1837. Compilers harnessed the power of computers to make programming easier by allowing programmers to specify calculations by entering a formula using infix notation. Scripting and breakpointing is also part of this process. Debugging is a very important task in the software development process since having defects in a program can have significant consequences for its users. There exist a lot of different approaches for each of those tasks.