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. Computer programmers are those who write computer software. 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. One approach popular for requirements analysis is Use Case analysis. Also, specific user environment and usage history can make it difficult to reproduce the problem. After the bug is reproduced, the input of the program may need to be simplified to make it easier to debug. 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 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. This can be a non-trivial task, for example as with parallel processes or some unusual software bugs. There are many approaches to the Software development process. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. 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. Sometimes software development is known as software engineering, especially when it employs formal methods or follows an engineering design process. 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. High-level languages made the process of developing a program simpler and more understandable, and less bound to the underlying hardware. Implementation techniques include imperative languages (object-oriented or procedural), functional languages, and logic languages. Programs were mostly entered using punched cards or paper tape. In the 9th century, the Arab mathematician Al-Kindi described a cryptographic algorithm for deciphering encrypted code, in A Manuscript on Deciphering Cryptographic Messages. Also, specific user environment and usage history can make it difficult to reproduce the problem. However, readability is more than just programming style. Code-breaking algorithms have also existed for centuries. Ideally, the programming language best suited for the task at hand will be selected. He gave the first description of cryptanalysis by frequency analysis, the earliest code-breaking algorithm. Scripting and breakpointing is also part of this process. The first compiler related tool, the A-0 System, was developed in 1952 by Grace Hopper, who also coined the term 'compiler'.