



The original description of Euclid's algorithm appears in his "Elements", book 7, propositions 1 and 2. You can see it here at page 196: EUCLID SELEMENTS OF GEOMETRY : J.L. Heiberg : Free Download, Borrow, and Streaming : Internet Archive An alternative description is also given in book 10, propositions 2 and 3. Here at page 283: EUCLID SELEMENTS OF GEOMETRY : J.L. Heiberg : Free Download, Borrow, and Streaming : Internet Archive Selements of GEOMETRY : J.L. Heiberg : Internet Archive Selements of GEOMETRY : J.L. Heiberg : Free Download, Borrow, and Streaming : Internet Archive Selements of GEOMETRY : J.L. Heiberg : Free Download, Borrow, and Streaming : Internet Archive Selements of GEOMETRY : J.L. Heiberg : Free Download, Borrow, and Streaming : Internet Archive

Example from the lecture:

a = 24 b = 42 a = 24 b = 18 a = 6 b = 18 a = 6 b = 12 a = 6 b = 6 Analiza Algoritmilor - CB

L1a. Problems & Algorithms

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"An algorithm is a finite sequence of precise steps that can be used to solve a problem in a finite amount of time"

Test







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L1a. Problems & Algorithms

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strings strings A *problem* is a function from a set of inputs to a set of outputs

$$f\colon \Sigma_1^* \to \Sigma_2^*$$

A decision problem is a problem with a boolean output

 $f: \Sigma^* \rightarrow \{FALSE, TRUE\}$