

Usable characters: A, B, C, D, E

Rules that must always apply:

	Name	Beschreibung
Rule 1	chainResponse(A,C)	If character „A“ occurs, it must be directly followed by the character „C“.
Rule 2	succession(A,B)	If the character „A“ occurs, it must be eventually followed by character „B“. If the character „B“ occurs, character „A“ must have occurred sometimes before.
Rule 3	response(D,C)	If the character „D“ occurs, it must be eventually followed by character „C“.
Rule 4	precedence (C,B)	If the character „B“ occurs, character „C“ must have occurred sometimes before.
Rule 5	notCoExistence (A,D)	The characters „A“ and „D“ may not occur simultaneously in the character sequence.

Which rules does the character sequence „CBEAC“ fulfill?

„ACC“ is an invalid character sequence. How can „ACC“ be continued to a valid character sequence of minimal length?

How can the character sequence „CB“ be continued to a valid character sequence?

Provide all valid character sequences up to and including length 2.

Provide all valid character sequences of length 4 beginning with „DE“.

Provide a minimal valid character sequence, which includes the character „D“ twice.

Solutions

1)

a) chainResponse(A,C), response(D,C), precedence(C,B), notCoExistence(A,D)

2)

a) „ACCB“

b) Genot possible

3)

a) ϵ , „C“, „E“, „DC“, „CC“, „CE“, „EC“, „EE“

b) „DEDC“, „DEEC“, „DECC“, „DECE“

c) „DDC“