Rytter for CFPQ

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1 Linear input

Let the input grammar is

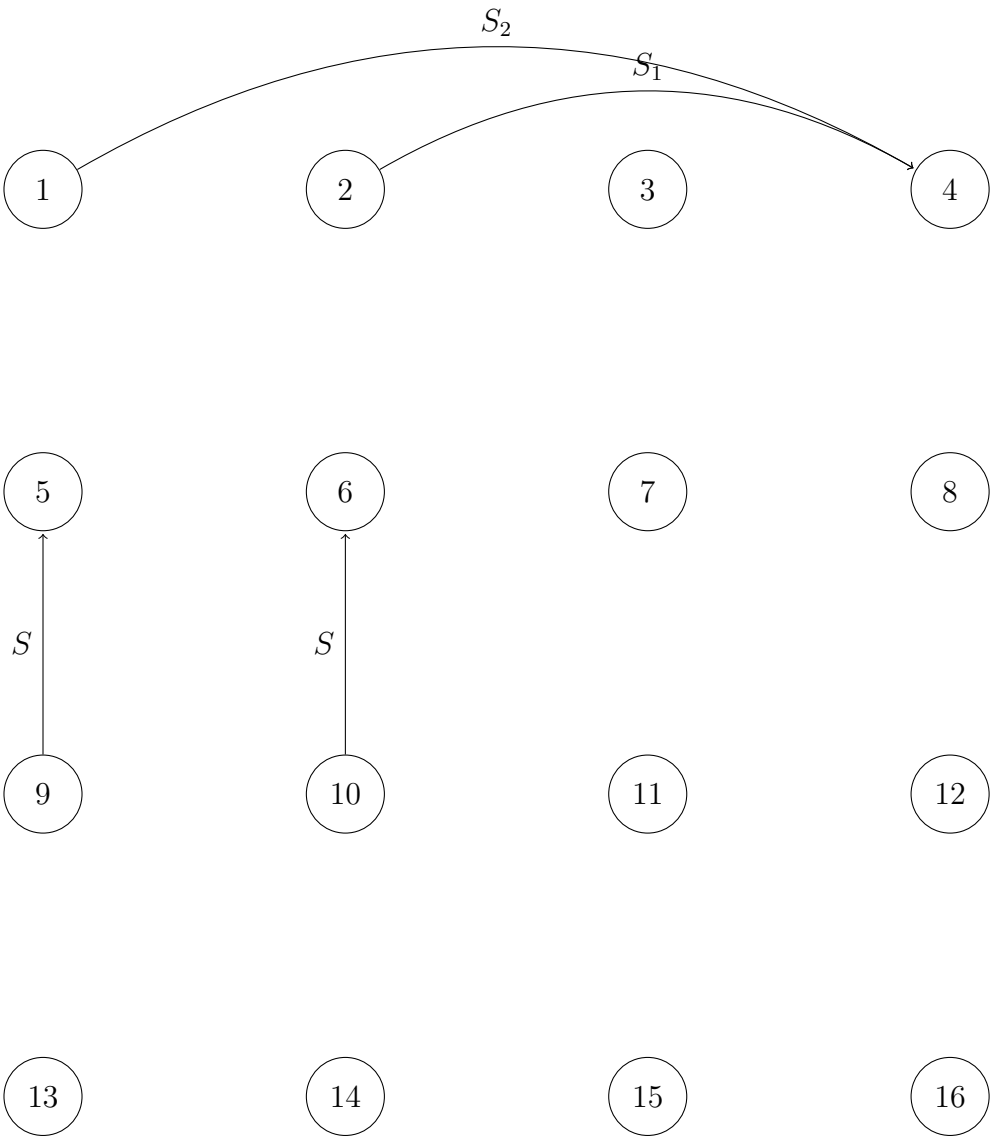
$$S \to a\ S\ b$$
$$S \to S\ S$$
$$S \to a\ b$$

The input grammar in CNF is

$$S \to A\ S_1$$
$$S_1 \to S\ B$$
$$S \to S\ S$$
$$S \to A\ B$$
$$A \to a$$
$$B \to b$$

Input: *abab*

Grid:



2 Graph input

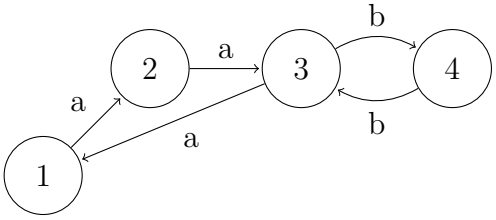
Let the input grammar is

$$S \to a\ S\ b$$
$$S \to a\ b$$

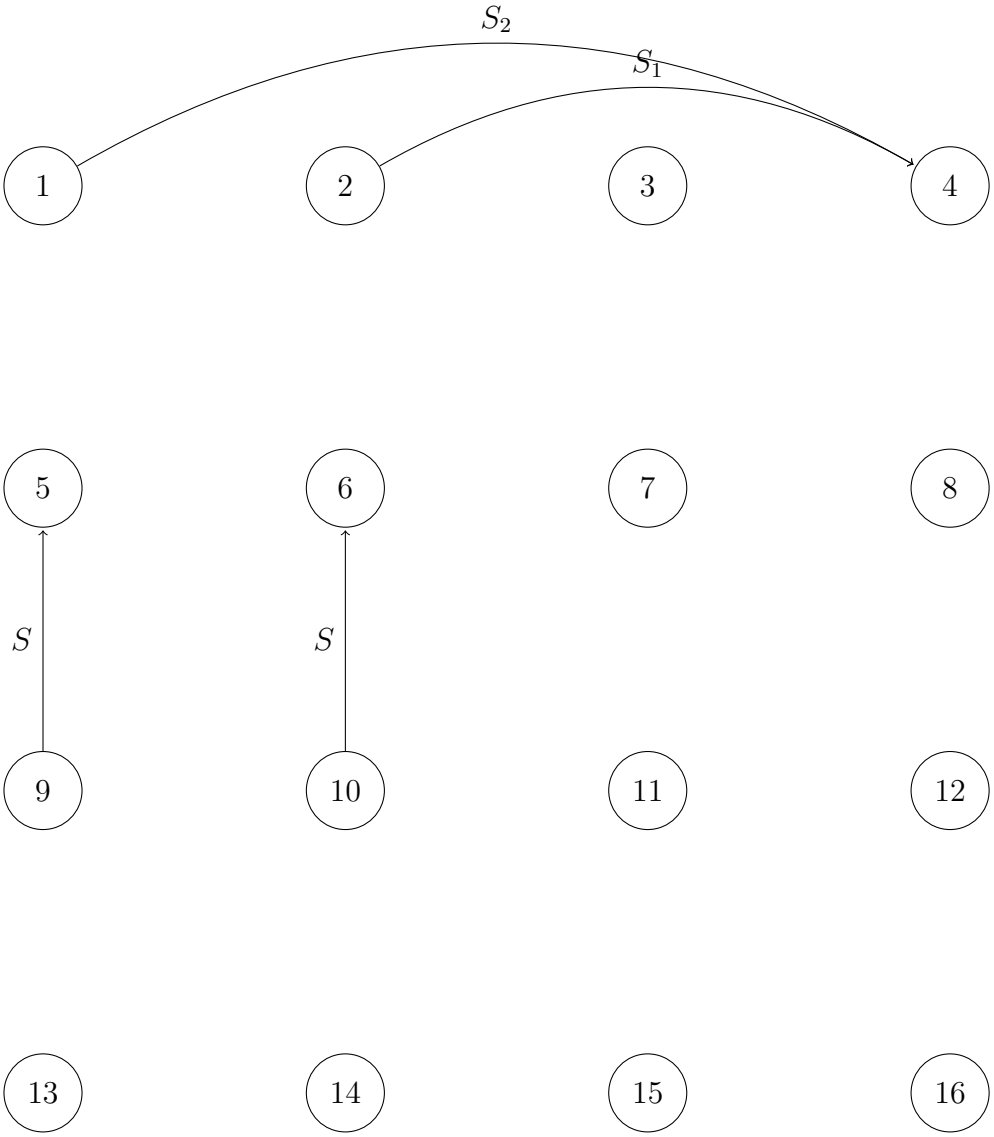
The input grammar in CNF is

$$S \to A\ S_1$$
$$S_1 \to S\ B$$
$$S \to A\ B$$
$$A \to a$$
$$B \to b$$

Let the input graph is



Grid:



References

[1] Krishnendu Chatterjee, Bhavya Choudhary, and Andreas Pavlogiannis. 2017. *Optimal Dyck reachability for data-dependence and alias analysis.*

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