

Theory of Computation

Exercise 5:

(Regular Grammar) \rightarrow *ត្រូវបានអនុញ្ញាតឱ្យមានតែ 0 និង 1 ប៉ុណ្ណោះ*

1. Give the right-linear grammar for the language

$$L = \{1^n 0^m : n \geq 1 \text{ and } m \geq 2\}.$$

100

1100

11000

$$S \rightarrow 1A$$

$$A \rightarrow 1A \mid 00B$$

$$B \rightarrow 0B \mid \lambda$$

ឈ្មោះ

2. Give the left-linear grammar for the language L in problem 1.

ឡើងដំបូង

បើមាន (ឬក៏ចាំបាច់)

start
① 000 →

$$L = \{1^n 0^m; n \geq 1 \text{ and } m \geq 2\}$$

$$S \rightarrow A00$$

$$A \rightarrow A0 \mid B1$$

$$B \rightarrow B1 \mid \lambda$$

*3. Draw NFA for the following grammar G.

$$G: A \rightarrow xyB,$$

$$B \rightarrow yxC,$$

$$C \rightarrow xB \mid yy$$

