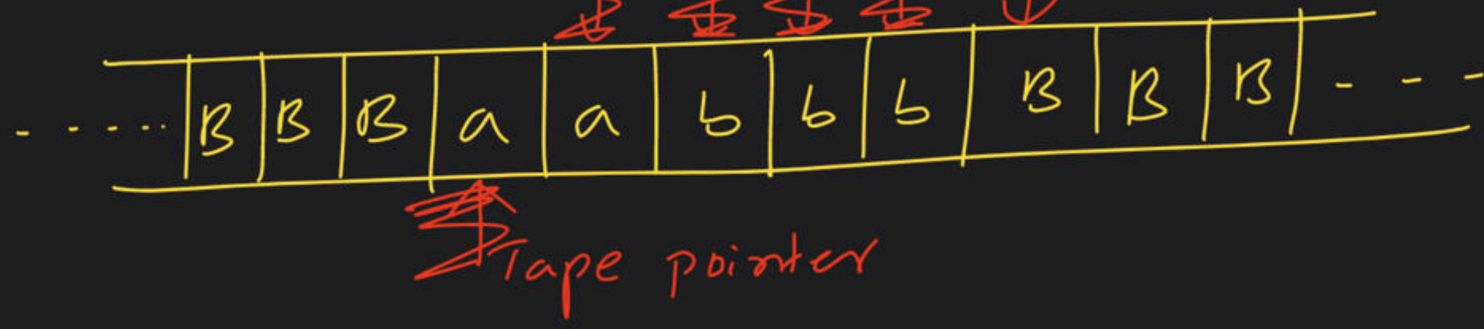
Undecidability - VII

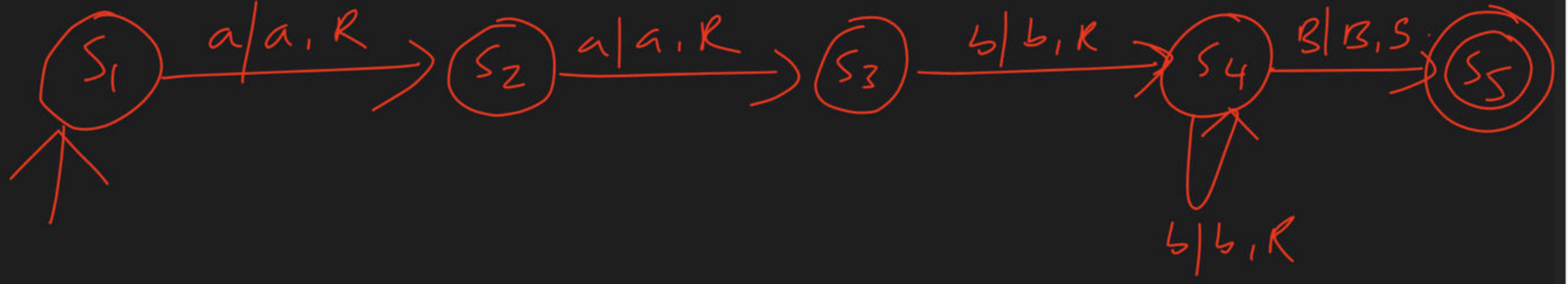
Complete Course on Theory of Computation

Subbarao Lingamgunta • Lesson 46 • Apr 10, 2022

construct TM $L = \{ aab^n \mid n \geq 1 \}$



TM as a Language Recognizer



1000 $\Longrightarrow$ 2, 3, 5, 7, ... 997

5, 7 $\Longrightarrow$ (35)

(1) TM as a language recognizer

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(2) TM as a Transducer

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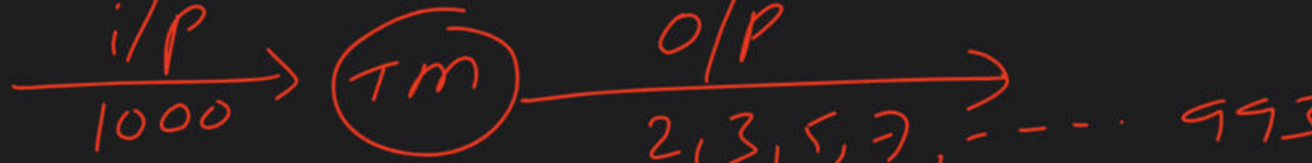
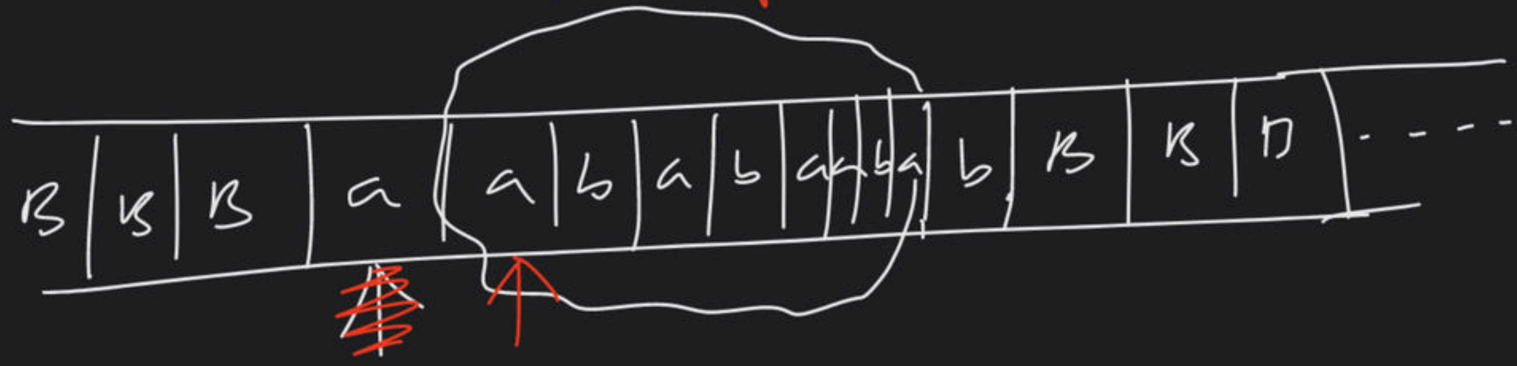
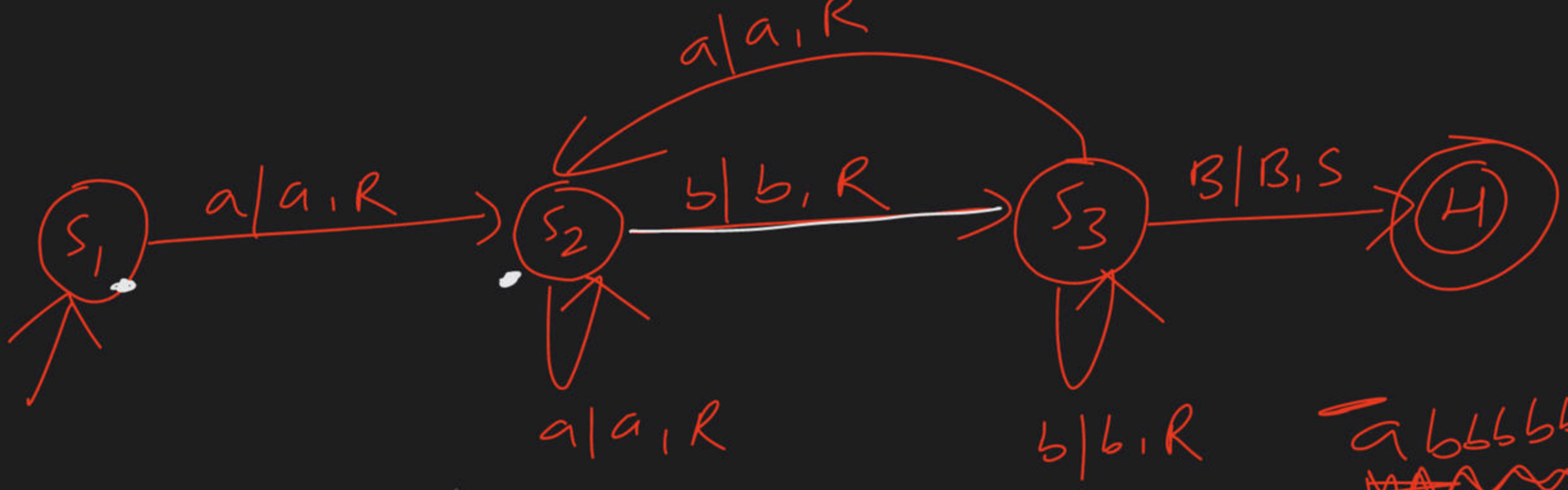
(3) TM as a enumerator



ex

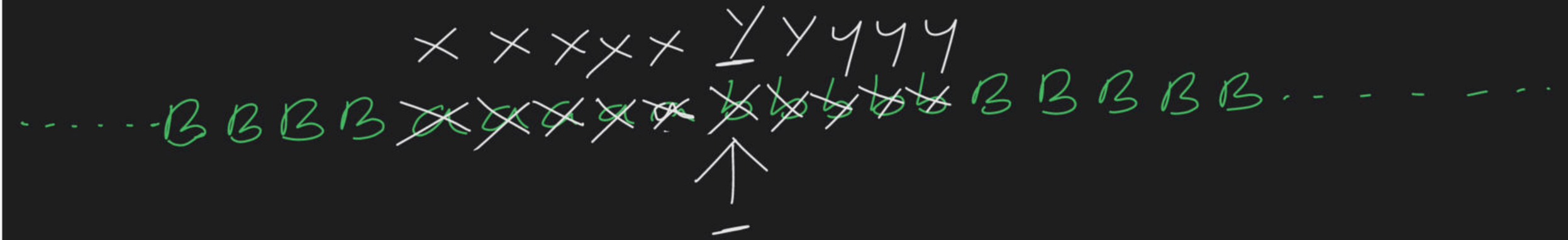
construct TM $L = \{$ set of all strings of a's & b's where every string starts with a & end with b $\}$

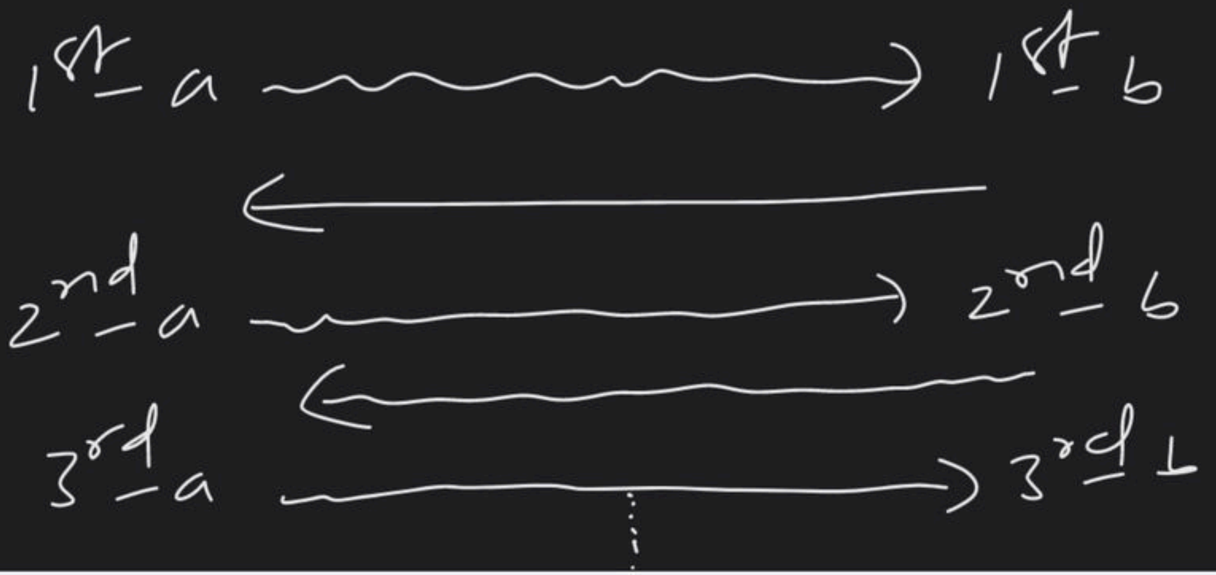


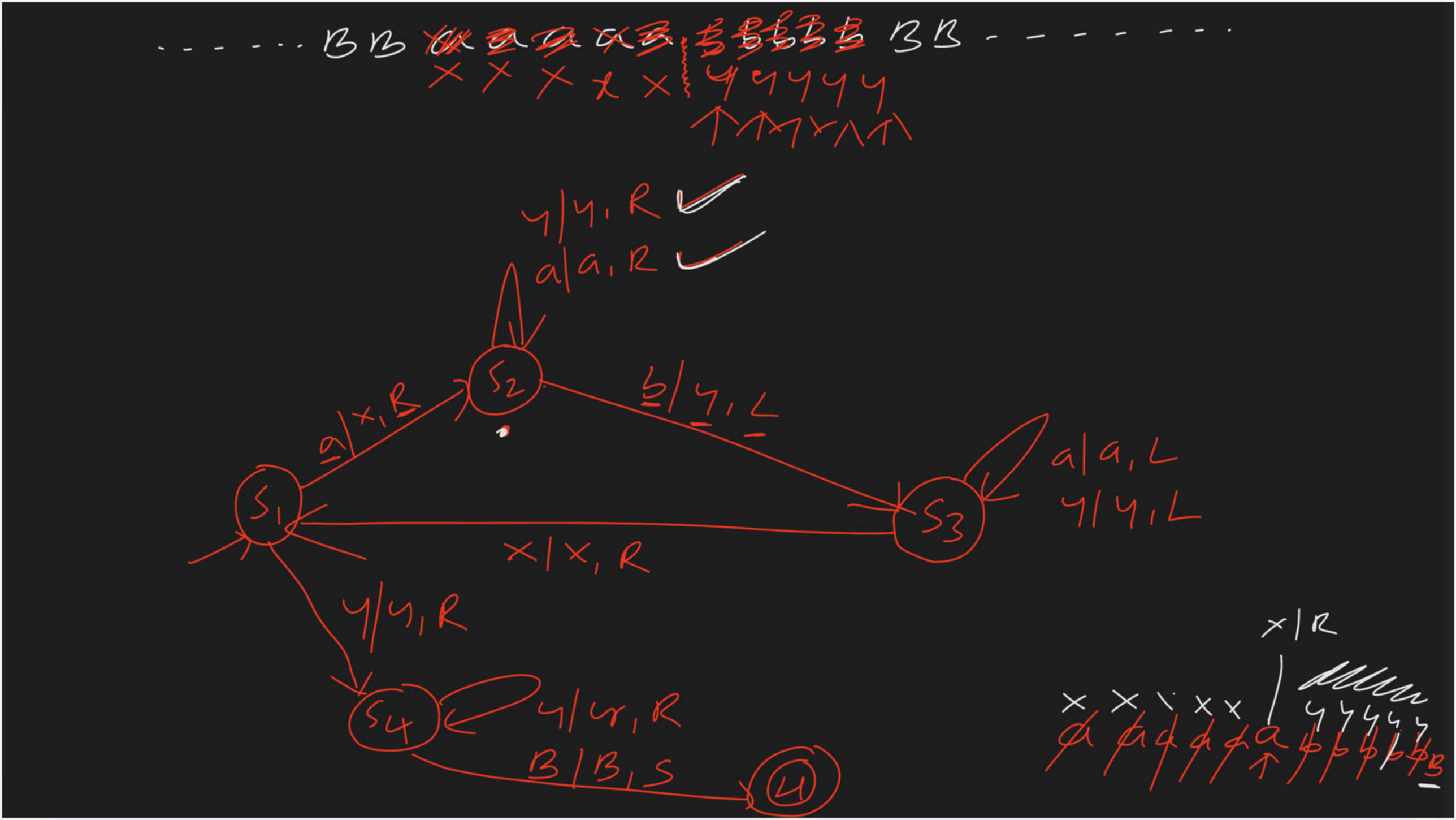


abbbbbbabbb

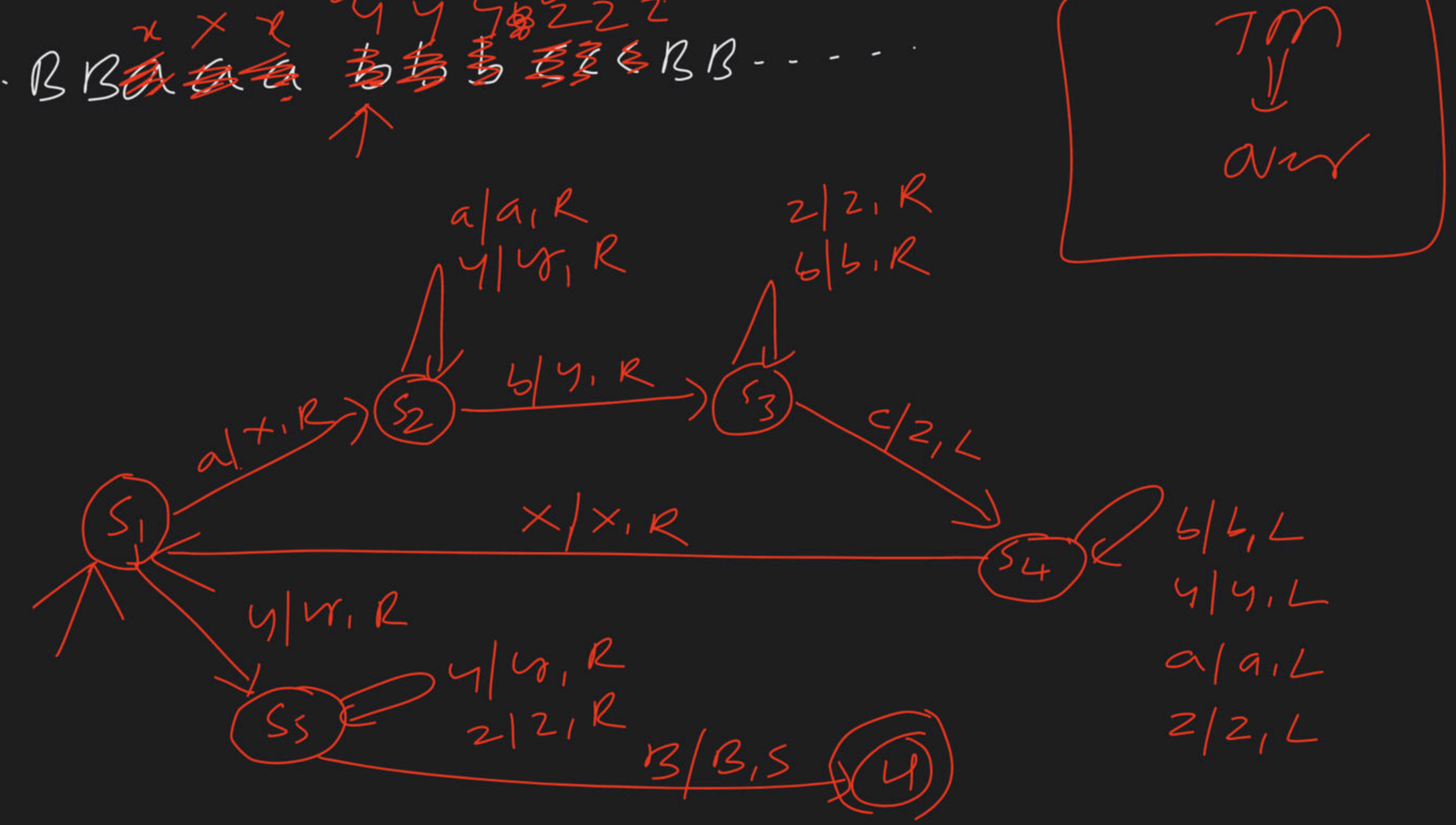
ex construct TM $L = \{ a^n b^n \mid n \geq 1 \}$

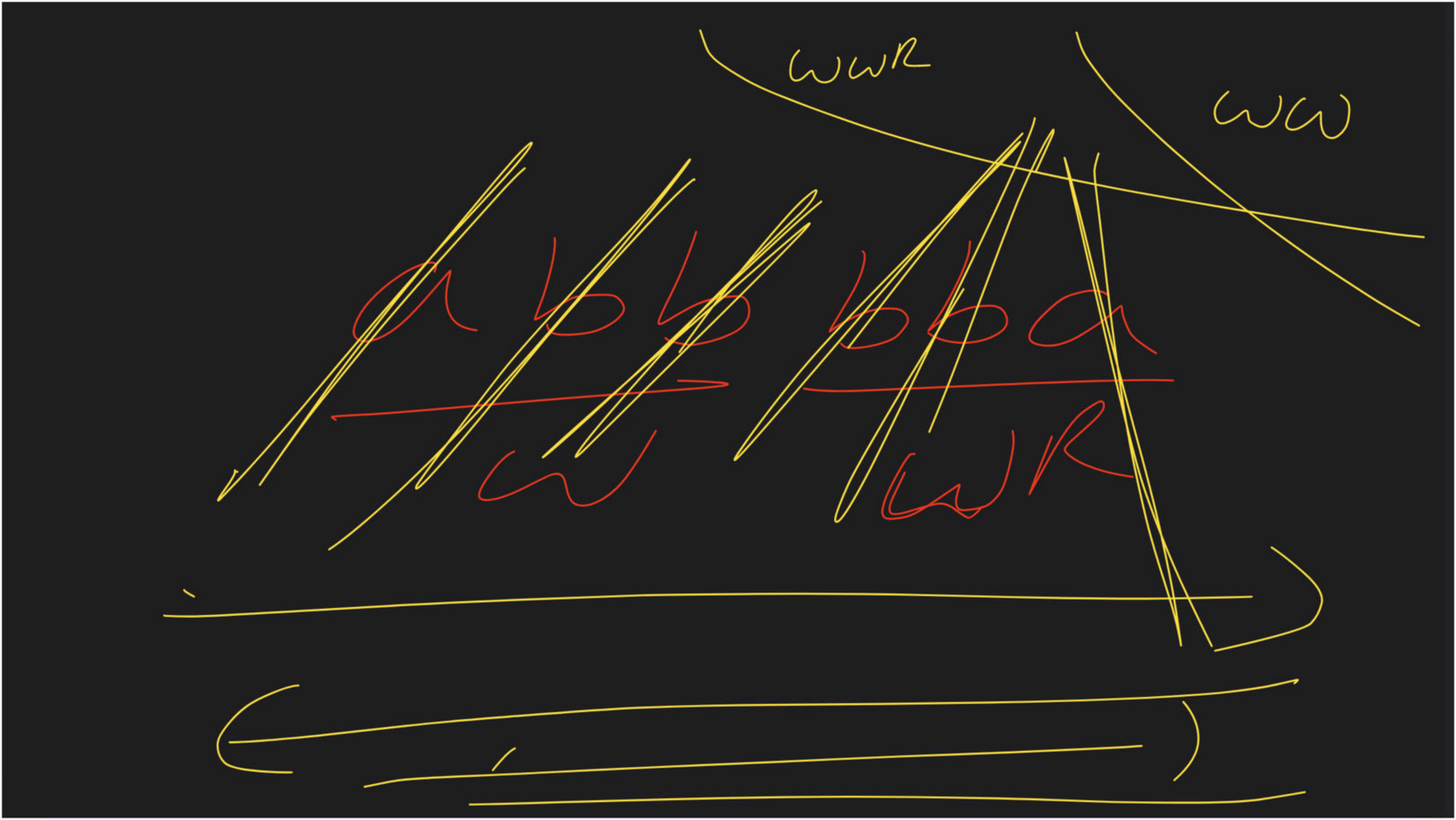





y/y, R
a/a, R
a/x, R
b/y, L
a/a, L
y/y, L
x/x, R
y/y, R
y/y, R
B/B, S
x/R

Construct TM $L = \{a^n b^n c^n \mid n \geq 1\}$

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