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COMP 4200

Homework 5

Logo

Description automatically generated with low confidence



S -> aSbS | aSb | a



S -> X | Y

X -> aXb | aYb | A | B | Ԑ

Y -> aY | Yb | A | B | Ԑ

A -> aA | Ԑ

B -> bB | Ԑ

A picture containing text

Description automatically generated



S -> aS | bS | cS | Ԑ



This grammar is inherently ambiguous. Since for the string abc’, we can draw two different paths.

Graphical user interface, text, application

Description automatically generated

**Step 1:**  Eliminate start symbol

S -> A , so

G1: S - > A

A -> BAB | B | Ԑ

B - > 00 | Ԑ

**Step 2:**  Remove the null

S -> A

A -> BB | B | BAB

B - > | 00 | Ԑ