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Lab 2 Write-Up

2. a) $A ::= A \& A \mid V$
$V ::= a \mid b$

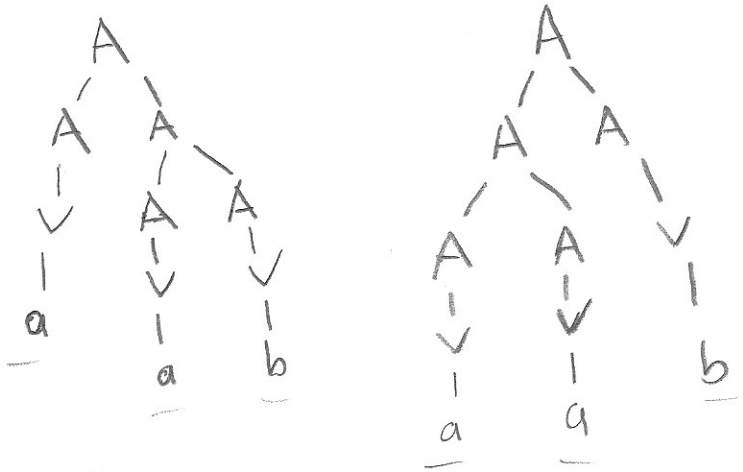
$\Rightarrow$

$A \in A_{objects}$

$V \in V_{objects}$

$a, b \in V_{objects} \rightarrow a, b \in A_{objects}$

b) Show the grammar is ambiguous. Will use two different parse trees to get to same result "aab"



c) Describe the language defined by the following grammar:

$S ::= A \mid B \mid C$
$A ::= aA \mid a$
$B ::= bB \mid \epsilon$
$C ::= cC \mid c$

Will create a string of repeating letters, S defines what letter the string will be, a, b, or c, no mixing. A, B, or C can then be called repeatedly to make a string of any size, the only exception or difference being B has the possibility of making an empty string "" due to the terminating character ϵ that defines empty.