HW4

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1. Let $|x|_a$ be the number of occurrences of the symbol a in the string x.

Define a context-free grammar for the language $L = \{\ w \in \{\ 1,0\}^{\ *} : |w|_0 = |w|_1\}$

$G = \{\ (S), (1,0), S, P\}$
$P = \{\ S \rightarrow 01|10|1S0|0S1|SSS\ \}$