Theory of Computation

Exercise 13&14: (Pumping Lemma for NonCFL)

Prove by P.L. that the following languages are not CFL.

1. L1 ={
$$a^n b^{n+1} c^{n+2}$$
: $n \ge 0$ }

Proof: Assume that L1 is CFL. There is PDA accepts L1 with m number of states

(9 Islianstring W = ambm+7 cm+2 path 33000 a loop

2. L2 ={ $w \in \{a, b, c\}^*$: $n_a(w) = \min(n_b(w), n_c(w))$ }