Theory of Computation

Exercise 13&14: (Pumping Lemma for NonCFL)

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

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

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

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