

CSC544 Assignment #2

due Tuesday 2/6 in class

version 1.2

Problems

1. Prove that the language $L = \{a^m b^n \mid a, b \in \Sigma \text{ and } m, n \geq 0\}$ is regular.
2. Prove that the language $L' = \{a^m b^n \mid a, b \in \Sigma \text{ and } m \geq 0 \text{ and } n \geq m\}$ is not regular.
3. Prove that the language L' in problem 2 is context-free.