CSC544 Assignment #9

due Tuesday 4/24 in class

version 1.0

Problems

1. Show that for any function $f\colon \mathcal{N} \to \mathcal{R}^+$, where $f(n) \geq n$, the space complexity class $SPACE(f(n))$ is the same whether you define the class by using a single-tape machine or a two-tape read-only input tape machine.

2. Let $EQ_{REX} = \{\langle R, S\rangle | R \text{ and } S \text{ are equivalent regular expressions}\}$. Show that $EQ_{REX} \in PSPACE$.