Homework Assignment #5
Due: November 7, 2012

1. We know that $\mathbf{L} \subseteq \mathbf{NL}$. Nobody knows whether $\mathbf{L} = \mathbf{NL}$. for every proper function $f(n) \geq \log n$. Show that if $\mathbf{SPACE}(f(n)) \neq \mathbf{NSPACE}(f(n))$ for some nice function $f(n) \geq \log n$, then $\mathbf{L} \neq \mathbf{NL}$.