Homework Assignment #5 Due: April 21, 2009

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