CpSc 3500 — Goddard

In-class Practice 20: Closure

For a language A, define Flip(A) as the set $\{\, ww^R : w \in A \,\}$. That is, take every string w in A and append its reverse to it.

Show that if A is recursive then so is Flip(A)

Here is procedure to check if input string x is in Flip(A):
first, if second half of x is not the reverse of first half, then reject.
otherwise let w be the first half of x.
submit w to the machine for A and output its answer.