Jonny Hughes
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Homework #17

Define a Turing machine to accept this language.

L = { ww^R | w ∈ {0,1}* } -- *any string* w *followed by the reverse of that string,* w^R

TM

A B C D E F G
---
0 1 X Y b
---
0 1
---
b

A

G

A,0,B,X,R
A,1,C,Y,R
A,b,G,-,-
B,0,B,0,R
B,1,B,1,R
B,b,D,b,L
C,0,C,0,R
C,1,C,1,R
C,b,D,b,L
D,0,E,b,L
D,1,F,b,L
E,0,E,0,L
E,1,E,1,L
E,X,A,b,R
F,0,F,0,L
F,1,F,1,L
F,Y,A,b,R

---

language : **L = { ww^R | w ∈ {0,1}* }**

this TM demonstrates format for input:

states, tape alphabet, input alphabet, blank symbol, start state, accepting states, transitions