# p« \Ln° j 9«§n h 9§9

g 9}H\ ©¢J ©·©¨

8 q« \Ln° j 9«§n h 9§9 _ 9 §´q0 nT 9«§n h 9§_n j §\9§ « 0 9 §9Hc §}«H§«}0J °_§\ §\0 }0 h 9_j_jX q9}§ §\0 9 h 0 9 §\0 i S8 r j n j ] L0»j_§0 »j§0 §9§0 9«§n h 9§9su ¯_§\ §\0 }0q0H§ §n §\0 §9Hc §\0 q« \Ln° j 9«§n h 9§9 \9 X9_j0L 9 h n}0 X}09§0} 9@_e_§´ §n L0 H}_@0 §\0 e9 j X«9X0u ¯0 °_ee _j §\0 T«}§\0} 0H§_n j q}n®0 §\9§ q« \Ln° j 9«§n h 9§9 \9 a« § §\0 9 h 0 9@_e_§´ L0 H}_@_j X 9 Gn j §0²§ T}00 X}9 h ] h 9}u

## o ¦ \0 L0»j_§_n j nT p K 8

¯\9§ _ j0° _j §\0 q« \Ln° j 9«§n h 9§9 _ §\9§ §\0}0 _ 9 §9Hc §\9§ °0 H9j nq0}9§0 °\0j °0 }0H0_®0 9 H\9}9H§0}u ¯\0j _§ }0H0_®0 9 H\9}9H§0} nT J §\0 9«§n h 9§9 _ Xn_j X §n j0²§ §9§0 @9 0L n j §\}00 n@a0H§I ou §\0 H«}}0j§ §9§0¡ ©u §\0 }0H0_®0L H\9}9H§0} nT ¡ ©u §\0 H\9}9H§0} n j §\0 §nq nT §\0 §9Hcu

^T ´n« °}n§0 n«§ §\0 L0»j§_n j nT §9§0]§}9 j _§_n j T«j H§_n j J _§ °n«eL @0 n h 0§_j X e_c0I : *Q Z ! Q*J °\0}0 *Z* L0 j n§0 §\0 H\9}9H§0} _j §\0 §9Hc r9 j L nT Hn«} 0 §\9§ *Z* H9 j 0x«9§0 *Q*su

d0§¸ §9c0 §\0 q« \Ln° j 9«§n h 9§9 §\9§ L0 H}_@0 §\0 e9 j X«9X0 *L = fww^R g* 9 9j 0²9 h qe0u

N²9 h qe0 ouou *It is clear that we should push a into the stack if we receive a, before we finish going through the string w. And it is the same clear that we should get the top of the stack and check if it is the same as the received character after we go through the string w.*

*The tricky one is that we have to check these two kinds of situation at the same time, for that every time we get a character, it could be that the w is done or not.*

*We can use NFA with two state to construct the pushdown automaton we need.*