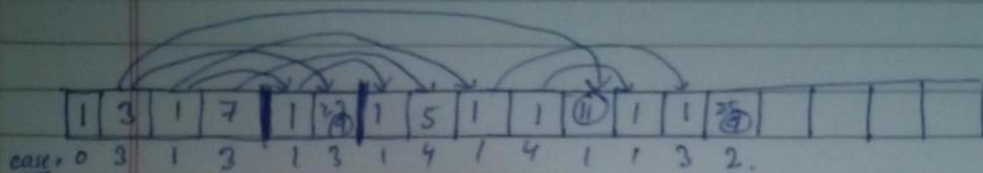


→ For odd length string

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
a b a x a b a x a b y b a x a b y b



case: 0 3 1 3 1 3 1 4 1 4 1 1 3 2.

○ → new center

↓ After this we have to find new center

Cases:-

- ① Min length of largest Palindromic substring i.e., 1.
- ② Right side palindrome totally Contained under Current Palindrome. In this Case, Don't consider this as center.
- ③ Current Palindrome is proper suffix of input (Current palindrome expand till the end of right). Terminate loop in this Case. No better palindrome will be found on right.
- ④ Right side palindrome is proper Suffix & its corresponding left side palindrome is proper prefix of current palindrome. make largest such point as next center.
- ⑤ Right Side palindrome is proper ~~prefix~~^{suffix} of its corresponding left side palindrome is beyond current Palindrome. Don't consider this as center it will not extend at all.

For generalization (OR) To handle even length string
append '\$'

abcd → \$a\$b\$c\$d\$

Take as new input.