

# Longest palindromic substring

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8:53 a.m.

"babad" → "aba"  
→ "bab" → both are correct

Palindromic Substring → Reads the same forwards and backwards

"babad"

	0	1	2	3	4
0	1	0	1	0	0
1		1	0	1	0
2			1	0	0
3				1	0
4					1

Iterate over each char  
Increment the length each time

Check for 2 rules

1.- Edge chars are equal

2.- Inner substring is palindrome

Palindrome?  $\begin{cases} \text{yes} \rightarrow 1 \\ \text{no} \rightarrow 0 \end{cases}$

(1 length strings are palindromes)

$(0,0) \rightarrow "b" = 1$

$(0,1) \rightarrow "ba" = 0$

Once table is complete, pick the longest length of substrings, and return the substring