

Palindrome: Algorithm 1

Overview

To determine whether a string is a palindrome, the first algorithm we explored was:

1. Reverse the string.
2. Compare the reversed string to the original string.

For example, the reverse of the string "noon" is "noon". Since the reversed string is the same as the original string, "noon" is a palindrome.

For the string "dented", the reverse of the string "dented" is "detned". Since the reversed string is *not* the same as the original string, "dented" is *not* a palindrome.

Code

```
def reverse(s):
    """ (str) -> str

    Return s reversed.

    >>> reverse('hello')
    'olleh'
    """

    s_reversed = ''
    for ch in s:
        s_reversed = ch + s_reversed
    return s_reversed

def is_palindrome_v1(s):
    """ (str) -> bool

    Return True if and only if s is a palindrome.

    >>> is_palindrome_v1('noon')
    True
    >>> is_palindrome_v1('radar')
    True
    >>> is_palindrome_v1('kayaks')
    False
    """

    s_reversed = reverse(s)
    return s == s_reversed
```

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