125. Valid Palindrome

A man, a plan, a canal: panama

↳ It's a palindrome

First lower case all

s.lower() a man, a plan, a ...

Then remove non alpha numeric

s = "".join(char for char in s if char.isalpha())

amanaplanacanalpanama

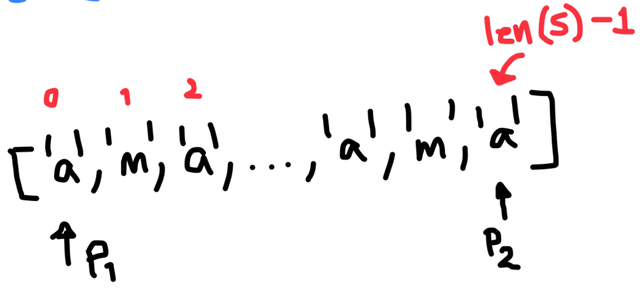
Make S a list

s = list(s) ['a','m','a','n',...

Create to pointers at the beginning and at the end of the list

$P_1 = 0$

$P_2 = len(s) - 1$



then review at the same time P_1 and P_2 whilst $P_1 < P_2$

if arr[P_1] = arr[P_2]
move P_1 to the right
move P_2 to the left
and return True
if arr[P_1] != arr[P_2]
return False

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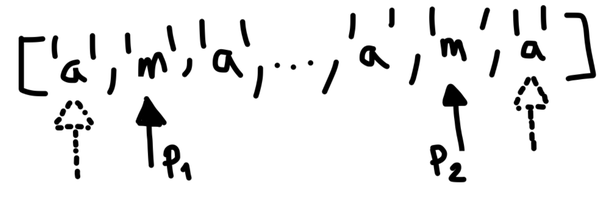
While P1 < P2:
    if s[P1] == s[P2]:
        P1 += 1
        P2 -= 1
    else:
        return False
return True
```



We're reviewing just once the list so the time complexity is O(n)