

10. Write a program for to check whether a given String is Palindrome or not using recursion

Code:

```
def is_palindrome_recursive(s):  
    if len(s) <= 1:  
        return True  
    if s[0] != s[-1]:  
        return False  
  
    return is_palindrome_recursive(s[1:-1])  
  
string = input("Enter a string: ")  
  
if is_palindrome_recursive(string):  
    print(f'"{string}" is a palindrome')  
else:  
    print(f'"{string}" is not a palindrome')
```

Output:

```
Enter a string: racecar  
"racecar" is a palindrome  
|
```

```
Enter a string: 121  
"121" is a palindrome
```

Time Complexity:

- $T(n) = O(n)$