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

PROGRAM:-

```
def is_palindrome(s):
    s = s.lower().replace(" ", "")  # Convert to lowercase and remove spaces
    if len(s) <= 1:
        return True
    else:
        if s[0] == s[-1]:
            return is_palindrome(s[1:-1])  # Recursively check inner substring
        else:
            return False

# Test the function
input_string = "A man a plan a canal Panama"
if is_palindrome(input_string):
    print(f"{input_string} is a palindrome.")
else:
    print(f"{input_string} is not a palindrome.")
```

output:-

```
A man a plan a canal Panama is a
    palindrome.

=== Code Execution Successful ===
```

Time complexity:-O(n)