10.WRITE A PROGRAM 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
    if s[0] != s[-1]:
        return False
    return is_palindrome(s[1:-1])


# 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.")
```

TIME COMPLEXITY:O(n)

INPUT:NAYAN

OUTPUT: