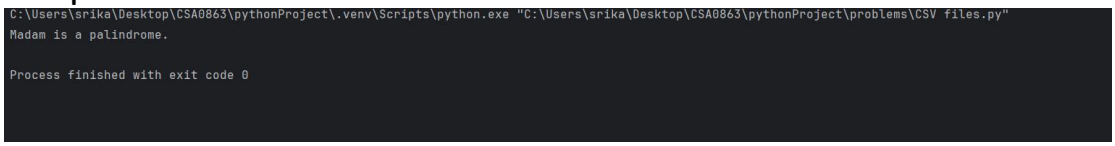
10. Write a program for to check whether a given String is Palindrome or not using recursion

Program:

```
def is_palindrome(s):
    s = s.lower()  # Convert string to lowercase for case-insensitive comparison
    if len(s) <= 1:
        return True
    if s[0] != s[-1]:
        return False
    return is_palindrome(s[1:-1])
input_str = "Madam"
if is_palindrome(input_str):
    print(input_str, "is a palindrome.")
else:
    print(input_str, "is notapalindrome.")
```

Output:



Time complexity:

O(log n)