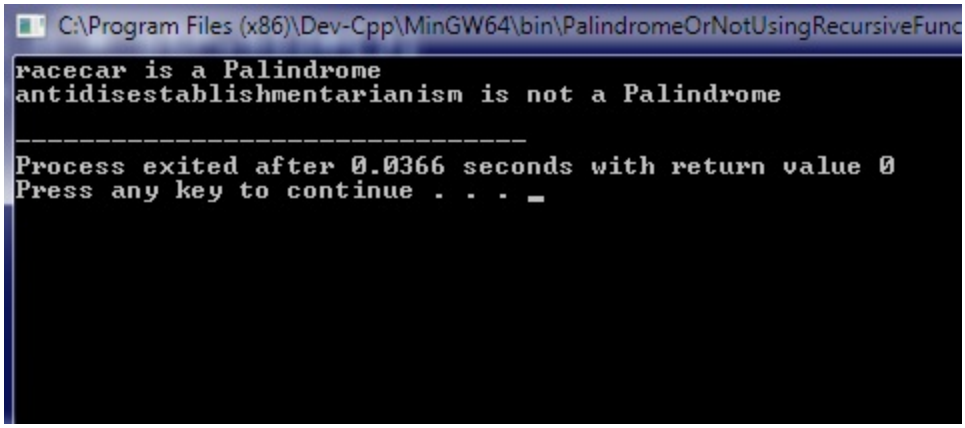
2a. Write a recursive Scheme function named 'isPalindrome' that checks if an input string is a palindrome and returns a boolean value. Do not use the 'reverse' functions for list or string types that come with Scheme, please write your own reverser function if you need the reverse of a string. Do not accept any other input types besides strings. Include comments with your code that includes the version of Scheme used, describes the function, explains the input type and the output. Provide 2 examples that are palindromes and 2 examples that are not palindromes.

```
#include <iostream>

#include <cmath>

using namespace std;

// Function declaration

bool isPalindrome(string str);

int main()

{

// Declaring string variables and assigning values to it

string s1 = "racecar";

string s2 = "antidisestablishmentarianism";

/* calling the functions to check whether

* the string s1 is palindrome or not
```

```
*/
if (isPalindrome(s1))
cout << s1 << " is a Palindrome" << endl;
else
cout << s1 << " is not a Palindrome" << endl;
/* calling the functions to check whether
* the string s2 is palindrome or not
*/
if (isPalindrome(s2))
cout << s2 << " is a Palindrome" << endl;
else
cout << s2 << " is not a Palindrome" << endl;
return 0;
}

/* This function will check whether the String
* passed as input to this function
```

```
* is palindrome or not

*/

bool isPalindrome(string str)

{

int len = str.size();

for (int i = 0; i < len / 2; i++)

{

        if (str[i] != str[len - 1 - i])

        return false;

  }



return true;

}
```

Output:


C:\Program Files (x86)\Dev-Cpp\MinGW64\bin\PalindromeOrNotUsingRecursiveFunc
racecar is a Palindrome
antidisestablishmentarianism is not a Palindrome

Process exited after 0.0366 seconds with return value 0
Press any key to continue . . .