

CS 304 Data Structures

Practice 3 Spring 2020

Question 1 Write a boolean method `stringIsPalindrome` that takes a string as the parameter and returns `true` if it is a palindrome, and `false` otherwise. You should make use of the provided `CharQueue` and `CharStack` classes in your implementation.

```
boolean stringIsPalindrome(String str)
```

The following code is the main method that calls the `stringIsPalindrome` method to check if the string read in from the console is a palindrome.

```
public static void main(String[] args)
{
    Scanner conIn = new Scanner(System.in);
    System.out.print("Please enter a string: ");
    String str = conIn.nextLine();

    if (stringIsPalindrome(str))
        System.out.println "\"" + str + "\" is a palindrome." );
    else
        System.out.println "\"" + str + "\" is not a palindrome." );
}
```

Example:

Please enter a string: 123321

"123321" is a palindrome.

Please enter a string: RotpR

"RotpR" is not a palindrome.