1. String palindrome or not using recursion

Code:

#include <stdio.h>

#include <stdbool.h>

#include <string.h>

#include <ctype.h>

bool isPalindrome(char str[], int start, int end) {

if (start >= end)

return true;

if (tolower(str[start]) != tolower(str[end]))

return false;

return isPalindrome(str, start + 1, end - 1);

}

int main() {

char str[100];

printf("Enter a string: ");

fgets(str, sizeof(str), stdin);

if (str[strlen(str) - 1] == '\n')

str[strlen(str) - 1] = '\0';

if (isPalindrome(str, 0, strlen(str) - 1))

printf("The string \"%s\" is a palindrome.\n", str);

else

printf("The string \"%s\" is not a palindrome.\n", str);

return 0;

}

Output:

Enter a string: Malayalam

The string "Malayalam" is a palindrome.

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Process exited after 4.723 seconds with return value 0

Press any key to continue . . .

