

**CS 1713**  
**Introduction to Computer Programming II**  
**Assignment 5**  
**Due Wednesday April 5**

1. (100 pts) Write a program to find the *largest* palindrome in a string. A palindrome is a sequence that reads the same backward as forward. *racecar*, *eve*, *kayak* are some examples.

For this assignment implement the following function

```
int palindromelength(char *str, int i, int j)
```

This function takes a string *str* and two points *i* and *j* and determines whether the string from *i* to *j* is a palindrome. If it is a palindrome, it returns the length of the palindrome and if it is not a palindrome, it returns -1.

Consider the following string as an example

ABCBAHELLOHOWRACECARAREYOUIAMAIIDOINEVERODDOREVENNGGOOD

It has many palindromes in it including ABCBA, RACECAR, ARA, IAMAI. Largest palindrome is NEVERODDOREVEN since it has the most characters in it.

Sample execution is given below

```
Enter a string
```

```
ABCBACDCBAAB
```

```
Largest palindrome is ABCBA
```

*Submit your program electronically using the blackboard system*

*The program you submit should be your own work. Cheating will be reported to office of academic integrity. Both the copier and copiee will be held responsible.*