# CS2413: Data Structures
# Fall 2021

# Lab Assignment #4

• Release date: Sep 21st, 2021 (Tuesday)
• Due date: Sep 23rd, 2021 (Thursday) 11:59 PM
• Please turn in your codes through Blackboard in the **same file in .cpp format**.
Do **NOT** compress/zip your submission. This is to ensure faster grading.
• Please name your submission file starting with "LastName_FirstName_Lab04"
• Total: 20 pts

Write a single C++ source file to do the following:                    [10+10= 20 pts]

**Q1**. Write a function that will take from user input an std::string as parameter and checks if the original and the reversed strings are same or not. If they are same then it prints the original and reversed string and a statement saying, "strings are palindrome" else it prints only the original and the reversed strings.
e.g.:
Case 1: If the user gives a string input "no x in nixon" then the program should output:

```
no x in nixon
noxinnixon
strings are palindrome
```

Case 2: If the user gives a string input "TGIF" then the program should output:

```
TGIF
FIGT
```

**Q2**. Write a function to tokenize IP addresses. Take the user input in a std::string variable and then tokenize it.
e.g: If the user gives and input 100.200.0.2 then the function would return {"100", "200", "0", "2"} or {100, 200, 0, 2}