

# CS1580 - Introduction to Programming Lab (FS2024)

## Lab 9

### Lab Objectives

In this lab, you will be implementing the following topics:

- String manipulation
- File I/O

### Lab Task: Count Words & Characters

In this assignment, you will write a program that reads input.txt file and prints the number of characters and words in that file.

**Implement in one file. No additional functions are needed.**

In the main,

1. Read the input.txt file using the syntax below. Include <fstream> in your code.  
`ifstream file("input.txt")`
2. Read the file line by line using the getline() function.
3. Count the number of words and characters. Print the results.

### Expected Output

Number of words: 198

Number of characters: 1085

### Gitlab Cloning Instructions

- Open the browser and go to <https://git-classes.mst.edu/>. Click on the Lab7 repository named 2024-FS-303-lab8-<your\_username>
- Click on 'Clone' button and copy the HTTPS link.
- Open Putty and
  - Change the directory to SDRIVE: `cd SDRIVE`
  - Clone the repository: `git clone <copy_the_HTTPS_link_here>`
  - Change the directory to cloned repository: `cd 2024-FS-303-lab9<your_username>`
- Start coding by opening a new file in nano: `nano main.cpp`

### Compiling Instructions

- To run your code, `fg++ main.cpp`
- To get the output, `./a.out`

### Submission Instructions

Push your code to your gitlab account.

- Add all your files to the repository, `git add .`
- Commit your changes, `git commit -m "<your_message_goes_here>"`
- Push the changes, `git push`