## **Lab3 CS202**

## Explorations (20 points)

Please try the following explorations at the end of chapter 2 and chapter3 and answer the questions in your report of this lab.

Exploration 2.1, 2.6, 2.4, 3.2, 3.8.

## Programming assignment (80 points)

In this lab, you are going to write your own version of tail command.

The tail command print the last 10 lines of each FILE to standard output by default. Please read the manpage of tail command. Please read the manpage of the tail command. Your program should support the following options

```
-c, --bytes=N
output the last N bytes; alternatively, use +N to output bytes
starting with the Nth of each file
```

```
-n, --lines=N
 output the last N lines, instead of the last 10;
```

For example, *tail myfile.txt -n 15* will print the last 15 lines to starndard output, and *tail myfile -c 20* will print the last 20 characters to the standard output.

Hint: Think about creating a buffer that always contains the last N lines read from the line.

## Submission

Source code

Report. It should address the following issues

- · Description about the assignment
- · Challenges you meet
- · Things you learned
- · Requirement not met
- · Test run. screenshot is OK.