## Write up Assignment 0: Shoulders

## **Testing**

Shoulders, should be identical to head. (With consideration to shoulders limited design.

- i. Comparing general command:
  - **1.** head -qn
  - 2. ./shoulders n

## Example:

- 1. head -qn 10 file1 > test h.txt
- 2. ./shoulders 10 file1 > test\_s.txt

Taking diff test\_h.txt test\_s.txt shows no diff

## **Testing Code for the spec:**

Majority of tests were done using Scripts provided by Christopher Lim and Anish P.

These tests include various arguments for *shoulders* and head to compare behavior.

Outside of the behavioral comparison testing, I benchmarked performance by

- ii. Comparing time general command:
  - **1.** Time head -qn
  - 2. Time ./shoulders n

Made iterations upon *shoulder* to determine the deficiencies regarding performance.

By removing the amount of system calls and using pointers, I significantly reduced the run time of shoulders to be closer to head.