

## CST2555

## Operating Systems & Computer Networks Week 10 (Revision)

## Introduction:

In this lab, we will review the previous labs. Please try to answer the questions based on your knowledge before consulting any materials.

## **Questions:**

- 1. From Learning Week 2: Navigate from 1000Files to the folder containing 823.txt. From here navigate to the folder with 288.txt. Then navigate back to 1000Files. Each of these instructions should be delivered in a single line, or one-liner.
- 2. From Learning Week 3: How many 10 letter or more words occur in TwelfthNight.txt?
- 3. From Learning Week 5: Create a bash script, sum.bash, to display the sum of all the numbers 1, .., n, where n is provided by the user, e.g., sum.bash 10 displays 55.

Pn	at	bt	Pri
1	0	20	7
2	4	2	1
3	12	3	8
4	8	15	2
5	7	17	5

Table 1: Preemptive Priority Scheduler, where  $P_n$  is process n, at are arrival times, bt are burst times and Pri is Priority

- 4. From Learning Week 6: Given the following array, myArray=(2 4 6 8 10), write a bash script to return and display the sum of the array.
- 5. From Learning Week 7&8: Use the Romeo and Juliette files downloaded that week. Use sed to replace all occurrences of Romeo with Juliet between lines 1 and 100.
- 6. From Learning Week 9: Using the priority scheduler calculate the average turnaround and waiting times for the processes in Table 1
- 7. Given an integer, write a bash script to find the factorial of that integer:
  - a) Without recursion
  - b) With recursion
- 8. Write a bash script to print the prime numbers from 1 to 50.