Dana Maloney Operating Systems Assignment 2

Due 10/28/2024

# Objective:

The purpose of this project is demonstrate different thread/resource management practices, specifically the

# Functions Used:

In parts…

# Results:

## Part 1:

test\_sem3 output: test\_sem4 output:

A screen shot of a computer program

Description automatically generated A screen shot of a computer program

Description automatically generated

It can be observed that in test\_sem3.c, Threads B and C take turns performing operations. However in test\_sem4.c, threads B and C perform all of their respective operations at once before another thread can access the resources. This is because test\_sem4 uses a mutex and semaphore, while test\_sem3 uses a semaphore only. The semaphore is used to ensure resources are not being used by other processes/threads in both programs, but the mutex reserves a shared resource so only one thread can access it at a time. In sem\_4.c, thread B gets access to all of the resources before thread C because of the aforementioned mutex.

## Part(s) 2/3:

# Observations/Discussions:

Bruh

# Conclusions:

Bruh

# Source Code: