CMPE 262 - Large Scale Programming
Worksheet (Week 09)
Section B

In this week you will do exercises about Concurrent programming with tread. Show all of your work to your assistant before begin to next parts.

Part I

Download the ATM example from the previous lecture notes and solve it just using **semaphore** only.
Test your program with different semaphore values.

Part II

In this part you are asked to write a simple producer-consumer program.

- Shared Data: In this shared memory, it is allowed to save one integer numbers only.
- Producers: Generates data for the shared memory. If there is an number, they have to wait, till a free space is available.
- Consumer: Calculates factorial of numbers. Once a number is calculated, it should be removed from the shared memory and make a free space. If there is not a number, then related consumers have to wait till a numbers is available.

Print out related messages about your program and test it with different number of producers and consumers.
Hint: Look at the Lecture notes as reference