Lab#1 CSC148, Posted: 3 Sept 2025

The module P1 material, as well as all in-class & zoom work so far, are the basis for the questions in this lab. This lab should be attempted before the second zoom class for Sept 5.

Question answers will be discussed at some point during the Sept 5 class.

This lab is a good indicator of your understanding of the topics covered so far.

Recall the “simple” event notations: **ai** = arrival time of ci, **si** = start service time of ci,

**fi** = service finish time of ci *(where ci is an alias for arriving customer number i)*.

*Recall that course module P1 has a reading assignment of Slide#2 that outlines the basics about a DES*

**Q#1**

**Part a)** Copy into your computer’s chosen gpss folder the file h0BaseModel\_148\_f25\_for\_lab1.gps located in the labs sub directory of the course web homepage.

On your computer, execute this model as is (i.e., making no source code modifications). What is the final (numerical) value of f2?

98.426

**Part b) In Part a),** at the instant after C2 (=customer 2) executed TERMINATE 1, what is the value of n(t)?

0.214

**Q#2**

Modify your barbershop model by UN-commenting these 2 statements before the CLEAR statement:

rngSeed equ 543210 ; Override default RN1 seed value

rmult rngSeed ; Pass RN1 user-specified RN1 seed to gpss

Execute the modified model and, as in Q#1 Part a), find the value of f2.

82.642