CS372 Operating System
Lab 4

Part I A single-lane bridge

- A single-lane bridge connects the two Vermont villages of North Tunbridge and South Tunbridge. Farmers in the two villages use this bridge to deliver their produce to the neighboring town. The bridge can become deadlocked if both a northbound and a southbound farmer get on the bridge at the same time (Vermont farmers are stubborn and are unable to back up). Using semaphores, design an algorithm that prevents deadlock. Initially, do not be concerned about starvation (the situation in which northbound farmers prevent southbound farmers from using the bridge, and vice versa).

Part II –Revise Part I

- Modify your solution to Part I so that it is starvation-free.

Part III Turn in your lab

Zip (1) the source code of Part I and Part II. Turn in the zipped file to Moodle before the deadline.