2) a. The screenshot below is the result of the program “Bridge that do not use the mutex lock.”

Text

Description automatically generated

b. The screenshot below is the result of the program “Bridge that uses the mutex lock.”

Text

Description automatically generated with low confidence

3) I. The type of lock I used for my code is mutex lock.

II. My first program uses 20 processes or threads. You can find the answer by counting the number of times the farmer cross either the North or South Tunbridge. For the second program, it has 20 processes. There are equal number of North and South processes for each program. There are 10 North and 10 South processes.