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CPSC 474

Project 1

## PSEUDOCODE FOR OUR PROGRAM

### 1) pseudocode for main function:

- a) Create an event sequence with a string form in a matrix form (row and column)
- b) Create a logical sequence with all int variables in a matrix form. (row and column)
- c) Print out the calculation as depends with output of each header files

### 2) Pseudocode for header.h file.

- a) Forming a dimension of the matrix which is 3\*4 matrix.

### 3) Pseudocode for algorithmVerify header file for problem 2 and 3.

- a) Using an int *algorithmVerify* function for the storing the event sequence after verifying the matrix is possible or not.
- b) Using if statement inside While loop for determining the max number and assign the max until it hit to end of the sequence.
- c) If any number of sequences is not equal to max, then the output prints "incorrect" for the matrix
- d) At first, initialize every array of the matrix null.

- e) Create a loop and if statement to know the arrays are in increasing order and initialize 'r' as a receiver if the current number is greater than previous plus 1.
- f) Check and find the sender which must be less than exactly 1 and mark it as "s".
- g) Use an if statement for checking a sender and also check the whether it is passing through null or not.
- h) Once the check is done, set the current array into letter and move to next array and finish the loop until to the end.
- i) And print out the logic clock.

4) Pseudocode for algorithmcalculate header file for problem 1.

- a) *int AlgorithmCalculate(string eventSequence[row][col]):* Creating an algorithmcalculate function to storing all the logic clock as well as output of the calculation.
- b) Initialize k as the value immediately before a in the same row
- c) Initialize logicClock to store our logic clock
- d) Initialize logicClocks to 0, Initialize responsePts to -1
- e) create a boolean for final result that matches the output with logicclock.
- f) Create a while and for function to travel each row and column respectively and update the logic clock.
- g) If we're not a response point or going past a response point, update our logic clock.

- h) For all rows, check if and where there is a response point, and update the logic clock if we find a response point before resetting it
- i) Set k equal to the current clock # in the column which will become the previous item.
- j) Set k to 0 for a new row.
- k) Check if we're done with the logicclock by knowing Boolean done = false or true.
- l) And Printout the logicClock