

Cosc 4740
Written Q10

Worth 10 points

*All answers are to be typed. This is **NOT** a programming assignment, no compiler needed, which also means it is due at class time.*

The following solution has been proposed for solving the mutual exclusion problem (assume that there are only two processes: 0 and 1):

```
int flag[2]; /* shared variable */
proc(int process id) {
    while (1) {

        compute; //takes a random amount of time

        flag[process id] = 1;
        while (flag[(process id+1)mod 2] == 1);

        critical section (which takes random amount of time)

        flag[process id] = 0;
    }
}
```

Assume that **flag[0]** and **flag[1]** are initialized to 0. Is this a correct solution? Explain your answer clearly.