CS 340
Lecturer: Simina Fluture

Example of a problem given during the Midterm of a previous semester.
Consider the following code for two concurrent processes:

```
                Flag[0] , Flag[1] = False;      Turn = 0
Process 0                                       process 1
while (true){                                   while(true) {

    L1:   flag[0] = true;                        L1:    flag[1]= true;
        while (flag[1] ) {                              while (flag[0] ) {
            if (turn == 0) { flag [0] = False; }        if (turn = = 1) { flag[1] = False; }
            while (turn ==1) go to L1;                          while (turn == 0) go to L1;
        }                                               }
                CS                                              CS
         Turn = 1;                              Turn = 0;
        Flag[0] = False;                                Flag[1] = False;
        remainder section;                      remainder section;
}                                               }
```

1) Discuss if the condition of No Starvation is satisfied. (if yes, explain why, if no, explain why not – give the execution sequence)
2) Discuss if the Mutual Exclusion Condition is satisfied. (if yes explain why, if no, explain why not – give the execution sequence)