

CSE321: Operating Systems Makeup Quiz

Name: _____ ID: _____ Section: _____

Show Peterson's solution for the given scenario.

- There are two processes: P_1 and P_2 .
- Each Statement takes 4 ms to execute.
- Context Switch will occur after 16 ms.
- Critical section contains 5 statements.
- The Remaining section contains 3 statements.
- For P_1 : $i=1$ and $j=0$
- For P_2 : $i=0$ and $j=1$
- $turn=0$
- $flag[0] = \text{FALSE}$, $flag[1] = \text{TRUE}$
- P_2 starts the execution first.

The structure of process P_i in Peterson's solution.

```
do{
    flag[i] = true;
    turn = j;
    while(flag[j] == true && turn == j){
        //busy wait
    }
    //critical section
    flag[i] = false;
    //remainder section

}while(true);
```

Complete the table given below for processes P_1 and P_2 using Peterson's solution.

Process 1: $i=1, j=0$	Process 2: $i=0, j=1$