- 1. Show Peterson's solution for the given scenario.
  - There are two processes:  $P_0$  and  $P_1$ .
  - Each Statement takes 4 ms to execute.
  - Context Switch will occur after 8 ms.
  - Critical section contains 2 statements.
  - Remainder section contains 4 statements.
  - For  $P_0$ : i=0 and j=1
  - For  $P_1$ : i=1 and j=0
  - turn=0
  - flag[0] = TRUE, flag[1] = FALSE

## The structure of process P<sub>i</sub> 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<sub>0</sub> and P<sub>1</sub> using Peterson's solution.

Process 0: i=0, j=1	Process 1: i=1, j=0
	1
•	7

- 2. Show Peterson's solution for the given scenario.
  - There are two processes:  $P_1$  and  $P_2$ .
  - Each Statement takes 3 ms to execute.
  - Context Switch will occur after 15 ms.
  - Critical section contains 6 statements.
  - Remainder section contains 10 statements.
  - For  $P_1$ : i=1 and j=0
  - For  $P_2$ : i=0 and j=1
  - turn=0
  - flag[0] = FALSE, flag[1] = TRUE

## The structure of process P<sub>i</sub> 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<sub>1</sub> and P<sub>2</sub> using Peterson's solution.

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