1.

Show Peterson's solution for the given scenario.
There are two processes: P1 and P2.
Each statement takes 4 ms to execute.
Context Switch will occur after 12 ms.
The critical section contains 5 statements.
The remainder section contains 8 statements.
For P1: i=0 and j=1
For P2: i=1 and j=0
Initially:
turn = 1
flag[0] = TRUE, flag[1] = FALSE

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