CSGE602055 Operating Systems
CSF2600505 Sistem Operasi
Minggu 07

Rahmat M. Samik-Ibrahim

Universitas Indonesia

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Agenda

- Reference: (OSCE2e ch5) (UCB 7/8) (UDA P3L3/4) (OLD 04)
- The Critical Section Problem
- Race Condition
- Peterson's Solution
- Semaphores
- Deadlock and Starvation
- Deadlock Characterization
- Resource Graph

Peterson's Solution

Process 0   **Process 1**

                         turn =

```
flag[0]=                         flag[1]=

do {                             do {
   flag[0] = true                   flag[1] = true
   turn = 1                         turn = 0
   while (flag[1] && turn == 1)     while (flag[0] && turn == 0)
     (do nothing);                    (do nothing);
   [CRITICAL SECTION];              [CRITICAL SECTION];
   flag[0] = false                 flag[1] = false
   [REMAINDER SECTION];            [REMAINDER SECTION];
} while(true);                   } while(true);
```

- semaphores()
- pthread()

- This is the end of the presentation.