EECS 678 - Lab 09

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`http://people.eecs.ku.edu/~vvivekan/lab/procfs/procfs.html`

1. *Is lack of change in system and user time in between sampling periods a guarantee that deadlock has occurred? Explain briefly.*

   No. It is possible that none of the diner threads got scheduled since the last sample was taken. This becomes more likely as the duration between samples is decreased.

2. *What aspects of the system conditions would affect how long the sampling period should be to ensure a reliable assessment of whether deadlock has occurred or not.*

   The duration of a jiffy and the processor load.

3. *Informal experimentation tends to show that larger values of ACTIVE_DURATION make deadlock less likely, as indicated by how many sampling periods it takes to occur, and that smaller values make it more likely. Try a few different values yourself and then discuss whether you think this is true, and why you think it might have the influence you observe.*

   The longer the ACTIVE_DURATION value is, the lower the rate of chopstick grabbing performed by the diners. If the sampling frequency is left unchanged but we vary the value of ACTIVE_DURATION, we observe that when the ACTIVE_DURATION value is high, the diners don't initiate the action associated with deadlock nearly as often.