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**EECS678 Lab11 Report**  
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**04/21/15**

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

**Yes, the lack of change in system and user time in between sampling periods will lead to deadlock. Because if both of kernel and user mode have no updated value, it will occur deadlock.**

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 sampling period must be higher than the frequency cpu has on updating the time record.**

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.

**I think it could because during the sample period, the shorter active time is the more activities occur. In other words, to make it easier to hit the deadlock.**