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6.033 Computer System Engineering  
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## Preparation for Recitation 6

Before reading the Eraser paper, refresh your memory on what race conditions are and the troubles that they can cause by revisiting sections **5.2.2**, **5.2.3**, and **5.2.4** of the class notes. Then, read the Eraser paper, with the following questions in mind:

- According to the lockset algorithm, when does eraser signal a data race? Why is this condition chosen?
- Under what conditions does Eraser report a false positive? What conditions does it produce false negatives?
- Typically, instrumenting a program changes the intra-thread timing (the paper calls it interleaving). This can cause bugs to disappear when you start trying to find them. What aspect of the Eraser design mitigates this problem?
- Writing serious multi-threaded code is generally reserved for "wizard" programmers; is Eraser functional enough and easy enough to use that non-wizards could use it to write safe code? Think it would have helped the Therac-25?