

## Quiz Four of Operating System

Fall 2017, 106F14A

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**Question 1:** Provide two programming examples in which multithreading provides better performance than a single-threaded solution.

**Answer:**

**Question 2:** Which of the following components of program state are shared across threads in a multithreaded process?

- a) Register values    b) Heap memory    c) Global variables    d) Stack memory

**Answer:**

**Question 3:** Using Amdahl's Law, calculate the speedup gain of an application that has a 60 percent parallel component for (a) two processing cores and (b) four processing cores.

**Answer:**