11/17/15 Pre-Class Work

* Required

Harvard email address: *

Please indicate which course you are taking. *
- CS61 (College)
- CSCIE-61 (Extension)

Synchronization wrap up

Which of the following calls might cause a thread to block? *

- pthread_mutex_lock
- pthread_mutex_unlock
- pthread_mutex_trylock
- pthread_cond_wait
- pthread_cond_signal
- pthread_cond_broadcast
- pt61_sem_P
- pt61_sem_V

Remember, it has a mutex inside!

You should always place your CV signal/broadcast inside your mutex_lock/mutex_unlock block. *

- True
- False

Pthread mutex locks and trylocks are two different structures. *

- True
- False

The pthread library is aware of the condition to be checked when using a CV. *

- True
- False

Virtual memory
Virtual memory support is provided by:

- The hardware
- The operating system
- Both the hardware and the OS
- Neither the hardware nor the OS

Given the x86 virtual address 0xABCDEF01. What is the page offset? *
Please write answers in hex, beginning with 0x and using capital letters.

\[ 0xF01 \]

Given the x86 virtual address 0xABCDEF01. What is the L1 index? *
Please write answers in hex, beginning with 0x and using capital letters.

\[ 0x2AF \]

Given the x86 virtual address 0xABCDEF01. What is the L2 index? *
Please write answers in hex, beginning with 0x and using capital letters.

\[ 0x0DE \]

Given the x86 virtual address 0x12345678. What is the page offset? *
Please write answers in hex, beginning with 0x and using capital letters.

\[ 0x678 \]

Given the x86 virtual address 0x12345678. What is the L1 index? *
Please write answers in hex, beginning with 0x and using capital letters.

\[ 0x048 \]

Given the x86 virtual address 0x12345678. What is the L2 index? *
Please write answers in hex, beginning with 0x and using capital letters.

\[ 0x345 \]

Use the diagram below to answer the following questions

x86 Page Tables