




Consistency & Synchronization Quiz

1 play · 63 players





 A kahoot by Penn State

Questions (5)

1 - Quiz

What is NOT true about sequential consistency?





60 sec

-  It is what is intuitive to you ✗
-  It maintains program ordering ✗
-  It ensures write atomicity ✗
-  A system with a write buffer is sequentially consistent ✓

2 - Quiz

What is NOT true about processor consistency?

60 sec

-  Writes could be visible in different orders to different processors ✗
-  Loads can bypass stores to the same address ✓
-  Memory fence is needed to make things sequentially consistent ✗
-  A system with a write buffer can fall into this category ✗

3 - Quiz

What can Print A print in sequential consistency (SC) and processor consistency (PC)?

A = Flag = 0

P1

P2

A = 1
Flag=1with
Pr 60 sec);

Only A=1 for both



A=1 for SC, A=0, 1 for PC



A=0, 1 for both



A=0, 1 for SC, A=1 for PC



4 - Quiz

What is a critical section?

30 sec



A section of code only one thread can enter at each time



An abstract concept you grab to access a shared resource



A barrier that disallows certain operation reordering



A special instruction required to implement locks



5 - Quiz

Why do we need to implement lock?

30 sec



To eliminate data races



To make code faster



To realize sequential consistency



To deal with memory consistency issues

