Començat el	diumenge, 10 d'octubre 2021, 12:51
Estat	Acabat
Completat el	diumenge, 10 d'octubre 2021, 12:53
Temps emprat	2 minuts 7 segons
Qualificació	**2,00** sobre 2,00 (**100**%)

Pregunta **1**

Correcte

Puntuació 1,00 sobre 1,00

Assume a system with two processors (cores) in a centralized memory system, each one with a private private cache (write-allocate and write-back policies) executing the following code sequences:

CORE1

```
a = 1;
while (a==1);
a = 1;
printf("Done 1!");
```

CORE2

```
a = 0;
while (a==0);
a = 0;
printf("Done 2!");
```

In a **non-coherent system**, which one the following outputs would be possible (choose as many as possible):

Trieu-ne una o més:

- [ ] Done1! Done2!
- [ ] Done2! Done1!
- [ ] Done1!
- [ ] Done2!
- Nothing printed ✔ When evaluating the condition in the while loop on a non-coherent system each core would retrieve the value that it has written in its own cache in the initial assignment. Therefore, both would get into an infinite loop.

La teva resposta és correcta.

Pregunta **2**

Correcte

Puntuació 1,00 sobre 1,00

However, if the system is coherent, which of the following outputs would be possible? (choose as many as possible)

Trieu-ne una o més:

- Done1! Done2! ✔ Coherence will make changes visible to both cores. Therefore

both cores will exit the loop at some point. The order cannot be determined though.

- Done2! Done1!

✔ Coherence will make changes visible to both cores. Therefore both cores will exit the loop at some point. The order cannot be determined though.

- [ ] Done1!
- [ ] Done2!
- [ ] Nothing printed

La teva resposta és correcta.

◄ Video lesson 4 (part 2): cache coherence problem

Salta a...

Video lesson 4 (part 3): how to get coherence? ►