Començat el	dissabte, 16 d'octubre 2021, 16:06
Estat	Acabat
Completat el	dissabte, 16 d'octubre 2021, 16:16
Temps emprat	9 minuts 41 segons
Qualificació	**2,00** sobre 2,00 (**100**%)

Pregunta **1**

Correcte

Puntuació 1,00 sobre 1,00

Assume a directory-based multiprocessor system with four processors, each with 24 GB of main memory and with the corresponding directory associated. Memory lines are 64 bytes long. Data coherency is maintained using a Write-Invalidate protocol.

How many entries exist in each one of the four directories?

Trieu-ne una:

- 24×2^{30} entries in each directory
- 4 entries in each directory
- 24×2^{24} entries in each directory

✔ Correct! The number of entries is the number of memory lines in each memory, that is $24 \times 2^{30} / 2^{6}$, since each memory line is 64 bytes (i.e. 2^{6} bytes).

La teva resposta és correcta.

Pregunta **2**

Correcte

Puntuació 1,00 sobre 1,00

Assuming the explanation in the video lessons, how many bits are needed in each directory entry?

Trieu-ne una:

- 4 bits in total
- 5 bits in total
- 1 bit for clean/dirty (D)
- 64 bits, one for each byte in the line

✔ Well done! In class we will use two bits for the state (M , S, U), which in total would be 6 (2+4)

La teva resposta és correcta.

◄ Video lesson 5 (part 3): directory entry (notation a bit different from the one used in class)

Salta a...

Additional material ►