

**Començat el** dissabte, 18 de setembre 2021, 14:31

**Estat** Acabat

**Completat el** dissabte, 18 de setembre 2021, 14:34

**Temps emprat** 3 minuts 12 segons

**Qualificació** 3,00 sobre 3,00 (100%)

Pregunta **1**

Correcte

Puntuació 1,00 sobre 1,00

Assume we want to parallelize a loop with 100 iterations with no dependences among them. The finest possible granularity would imply:

Trieu-ne una:

- ☐ a. 1 task with 100 iterations per task
- ☐ b. 10 tasks with 10 iterations per task
- ☒ c. 100 tasks with 1 iteration per task

✓ Well done!

Your answer is correct.

La resposta correcta és: 100 tasks with 1 iteration per task

Pregunta **2**

Correcte

Puntuació 1,00 sobre 1,00

Assume we want to parallelize a loop with 100 iterations with no dependences among them. The coarsest possible granularity would imply:

Trieu-ne una:

- ☒ a. 1 task with 100 iterations per task
- ☐ b. 10 tasks with 10 iterations per task
- ☐ c. 100 tasks with 1 iteration per task

✓ Well done!

Your answer is correct.

La resposta correcta és: 1 task with 100 iterations per task

Pregunta **3**

Correcte

Puntuació 1,00 sobre 1,00

Given a task decomposition  $D_0$ , a finer-grain decomposition  $D_1$  would have more tasks, with less work per task. Therefore,  $D_1$  exposes more potential parallelism than  $D_0$  and this **always** implies that  $D_1$  executes faster than  $D_0$ . Note: assume that all tasks are totally independent in both  $D_0$  and  $D_1$ .

Trieu-ne una:

☐ Vertader

☒ Fals ✓

Congratulations! The exploitation of parallelism implies some overheads which can outweigh the benefits of having more tasks when they are too fine-grained.

La resposta correcta és 'Fals'.

[◀ Video lesson 2 \(part3\)](#)

Salta a...

[Additional material ▶](#)