Started on	Sunday, 7 April 2024, 6:04 PM
State	Finished
Completed on	Sunday, 7 April 2024, 6:11 PM
Time taken	6 mins 12 secs
Grade	**3.00** out of 3.00 (**100**%)

Question 1

Correct

Mark 1.00 out of 1.00

Fine grain parallelism:

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

Select one:

- 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.

The correct answer is: 100 tasks with 1 iteration per task

Question 2

Correct

Mark 1.00 out of 1.00

Coarse grain parallelism:

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

Select one:

- a. 1 task with 100 iterations per task ✔ Well done!

  Note however that in this case we would have a single task and all the iterations would be executed sequentially within that task.
- b. 10 tasks with 10 iterations per task
- c. 100 tasks with 1 iteration per task

Your answer is correct.

The correct answer is: 1 task with 100 iterations per task

Question 3

Correct

Mark 1.00 out of 1.00

Potential Parallelism vs Final Parallel Execution Speed:

A fine grain decomposition introduces more tasks than medium and coarse grain decompositions. Therefore, more potential parallelism is exposed and this always implies faster execution of the resulting parallel code.

Select one:

- True
- False ✔

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

The correct answer is 'False'.