LAB 02: CONCORRÊNCIA E PARALELISMO (11158)

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Aims:

To learn the fundamentals behind developing algorithms/programs that make use of parallel programming and concurrency techniques

Labs:

Experiment with technologies and frameworks that allow us to build parallel programs

Intended outcomes:

1. To be able to analyse and identify situations in which programs could benefit from parallelism and concurrency
2. To be able to scientifically reason about how parallelism has impacted performance

RECALL COURSE OBJECTIVES

We ran a Monte Carlo simulation to estimate the value of π in Java

- We got to know **git** and **GitHub**
- We ran a Monte Carlo simulation to estimate the value of π in Java
- We experimented with running the monte carlo simulation in parallel using threads
- Assignment PDF: https://github.com/MEI-CP/lab-assignments/

- We will tackle the same problem but using C as the programming language.
- Use `pthreads` to instantiate parallelism
- Try to reason about your results

  Why are they like this?
- Assignment PDF: https://github.com/MEI-CP/lab-assignments/

https://aulas.alxdavids.xyz/pergunta/qa0308a

BEFORE WE START...

https://aulas.alxdavids.xyz/pergunta/q82cc5e

PROGRESS CHECK

https://aulas.alxdavids.xyz/pergunta/qce9c73

FEEDBACK

Don't worry if you didn't reach a complete solution

Next week we will be working on the same problem but using **OpenMP**

A framework that can parallelise loops in different languages

Remember: My office hours are `14:00-16:30` on Tuesdays (P2:17)

See you next week!