

Lab-2: Abstract Metrics

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COMP 322, Spring 2016.

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Goals of the Lab

- Understand abstract metrics
- Understand actual speedup metrics
- Understand use of HJlib API: doWork

Instructions

Checkout lab_2 project from Subversion as a Maven project.

You can run and debug your code using IntelliJ. Remember to configure `-javaagent` in run configurations.

Refine solutions fast enough (ideal speedup) to pass Unit Tests.

Problem 1 – Reciprocal Array Sum

Use `async-finish` for parallelism while basically summing the elements of an array.

What kind of ideal speedups are achieved?

Is the total work done expected? Does total work increase as a result of parallelism in this program?

Problem 2 – Combinations

Use functional lists (COMP215!) to parallelize the computation of all possible combinations

What kind of ideal speedups are achieved?

Is the total work done expected? Does total work increase as a result of parallelism in this program?

Submitting your work

Commit your code and report file to subversion

Show your work to a member of the teaching staff and get checked off on Owlspace.