Multicore Processors: Architecture & Programming
Final Report

This is your final product! It is a full-fledged paper (similar in format to paper#9 in the course reading material). Below, you will find the sections to be included in your report. However, and because things can be a bit different for different projects, you are free to add any sections or sub-sections you see important. Remember, you must follow the format or you may risk losing points. You will be judged on all aspects of your project: survey, approach, experiments conducted, quality of your analysis, and presentation.

Sections to be included in the report

- **Abstract:** Write 1 paragraph summarizing your problem, 1-2 lines hinting on your technique, and 1-2 lines summarizing your finding(s).
- **Introduction:** Expand the abstract to include why the problem you are solving is important. Then, give a general idea about your way of approaching the problem.
- **Literature survey:** Feel free to organize this section in any way you want, include any subsections you want, and draw any Figures you like. But you need to discuss at least the following items:
  - What did others do regarding the topic at hand? Note: the worst survey ever is when you say "x has done y; z has done k; …". You must put the work of others in taxonomy. That is, "The solution to this falls in x categories: …. . In the first category x has done …".
  - What are the pros and cons of what they are doing?
  - Why their work is not enough and your proposed project is needed?
- **Proposed Idea:** Details of how you are approaching the problem at hand, such that if someone else reads this section, s/he will be able to replicate everything after reading this section and the next one.
- **Experimental Setup:** What are the tools/benchmarks/OS/programming languages/simulators/ … have you used? Also mention any setup you made to each of the tools you used (switches to a compiler, setup for a simulator, …).
- **Experiments and Discussion**: Here you must specify few things (better put them in tables, bullets, figures, diagrams instead of just writing paragraphs)
  - What are the experiments that you did? And why you did each experiment?

- o Analyze each graph and draw a conclusion from it.
  - o If there are any anomalies, you must also discuss it and try to find an interpretation.
- **Conclusion:** What are the most important findings of your project? A bullets list is the best here.
- **References:** In the same format as #9 in the reading list. Include here all the references you mentioned. No urls unless you are referring to a simulator or a software tool.

A Note About Analysis

In the results and analysis section of your report you need to provide two things:
1) graphs and/or tables showing your results
2) your analysis of these results.

If a graph shows that X increases with Y and in your analysis you just say that X increases with Y then you will get the grade for the graph and will lose the points of the analysis. Analysis means: WHY X increases with Y? WHAT can we learn from that? Is this what was expected? Are there any anomalies?

What to submit?

You need to submit in soft-copy emailed to the instructor and the grader:
- The pdf of your report
- The source code you have written
- A readme file telling us how to compile and run your code
- Put all the above in a zip file
- The name of the zip file is your project name
- email that zip file to the instructor and the grader
- The subject of the email: multicore: final report & code

Good Luck Folks!