

## CSE 351, Autumn 2010

### Written 6: Memory Organization and Caches

Due: Sunday, November 21 at 11 pm

[Paper solutions accepted at the beginning of class, Friday, Nov. 19 if you prefer.]

Questions? Problems? See the course website for contact info:  
[cs.washington.edu/351](http://cs.washington.edu/351)

### Introduction

The purpose of written assignments is to have you think about some of the topics covered in lecture and in readings from the text that may not be represented in the programming lab assignments. These assignments also prepare you for what exam problems might be like. You should note that there are many practice problems in the text whose solutions are conveniently located at the end of each chapter. Use these solutions as a guide for what we expect you to turn in for this assignment.

### Logistics

Since this is not a programming lab assignment, you'll be turning in physical paper. We prefer that you type up your solutions (neatly and well-commented) so that the TA grading the assignment finds it easy to read, although neatly hand-written solutions are acceptable. Diagrams may be included as free-hand drawings, if necessary.

### Grading and Solutions

The relative weight of the written assignments will be determined at the end of the quarter as we assess the time commitment required by each. For now, each assignment will be 10 points. All four written assignment take together, and relatively weighted, will account for 25% of your grade.

Due to the large number of students in the class, we will most likely not be grading every problem. We will only grade a subset. The 10 points for those problems will be scaled by the fraction of solutions turned in. For example, if we were to grade only the 2<sup>nd</sup> problem below, you could obtain a score of 10 for the correct solution. However, if this were to be the only solution turned in (no solutions for the other problems), then that 10 would be multiplied by  $1/5$  yielding a score of 2.0. To achieve the maximum score, all 3 solutions would be turned in to yield  $10 * (5/5) = 10$ .

We will provide extended solutions to all the problems – these will be handed out in class some time after the written assignment is due. That will provide some time for the TAs to identify common issues and address them explicitly if needed.

### Problems

- Problem 3.64
- Problem 6.27
- Problem 6.30
- Problem 6.35
- Problem 6.42