mmarolf@ethz.ch 1/1

Lab 1: Simulating and Exploring Cache Behavior

Introduction

Cache Implementation Design

Experimental Methodology

Benchmark Suite

Measurement and Metrics

Parameter Sweep

Results and Discussion

Effect of Cache Size

Effect of Block Size

Effect of Associativity

Replacement Policy Comparison

Discussion of Observations

Appendix

Effect of Cache Size on Performance (LRU, 4-way I-Cache, 8-way D-Cache, 32B blocks)

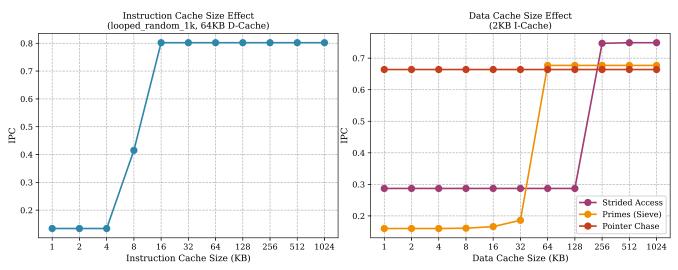


Figure 1: Cache Size Effect