

Assignment 4

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1 Introduction

In this assignment, we simulated the working of a pipelined processor model using Java. Each stage of processing (and the latches in between!) are coded as Java classes. The instructions queue into the processor, and if a conflict is detected, then the instructions in the previous latches are discarded. While this ensures correctness, it is at the cost of time and efficiency. We will work on improving this in the coming assignments.

2 Statistics

Program Name	Cycles	Number of OF stage stalls	Number of wrong branch taken
descending.out	658	122	176
evenodd.out	16	4	0
prime.out	75	11	10
fibonacci.out	157	40	32
palindrome.out	116	39	14

Table 1: Statistics of Assignment .out files