

Report

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1 Tabulation of Results

Program Name	Cycle Count	# Times OF Stage Was Stalled	# Wrong Branch Instructions
prime.asm	21	7	6
palindrome.asm	124	51	18
fibonacci.asm	232	20	102
even-odd.asm	19	10	4
descending.asm	792	150	268

Table 1: Table of Results

2 Comments on Observations

The cycle count of programs dropped to around half when they are run on pipelined processor as compared to the non-pipelined processor. In ideal conditions, the cycle count drops to around one fifth of the number of cycles in processor without pipelining. The ideal conditions are mostly not met because of various data hazards.

The number of wrong branch instructions and the number of OF stalls are also affected depending on the number of data hazards in a program.