

Lab #9 Writeup

<i>Name</i> DAN PORTS	<i>Meeting date & initials</i> 11/19/03 M.B.	<i>Score</i> 7
<i>Athena username</i> drkp		

If you work at home, please remember to upload your design files to Athena before coming to the lab for your meeting so you'll be able to demonstrate your design in the lab.

<i>Cache parameter</i>	<i>Alice's cache</i>	<i>Bob's cache</i>
Words/line	4	1
Total lines	16	64
Associativity	2-way	Direct mapped
Replacement strategy	LRU	--
Write strategy	Write-through	Write-through

✓ **Part A: Demonstrate Alice's cache running better than Bob's (3 points)**

Please record the results of running your program with each of the caches. Remember the goal is to be able to report at least twice as many cycles for Bob's cache as for Alice's.

<i>Cache statistic</i>	<i>Alice's cache</i>	<i>Bob's cache</i>
Hit %	99.9%	66.6%
Cycles	60023	140022

✓ **Part B: Demonstrate Bob's cache running better than Alice's (4 points)**

Please record the results of running your second program with each of the caches. Remember the goal is to be able to report at least twice as many cycles for Alice's cache as for Bob's.

<i>Cache statistic</i>	<i>Alice's cache</i>	<i>Bob's cache</i>
Hit %	59.9%	99.9%
Cycles	380016	100050