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Configuration: config/l1-small-4way 8
               Simulation Results
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Memory System:
    D Cache: Size = 4096, Associativity = 4, Block size = 32
     I Cache: Size = 4096, Associativity = 4, Block size = 32
    L2 Unified Cache: Size = 32768, Associativity = 1, Block size = 64
    Main Memory: Ready time = 30, Chunksize = 8, Chunktime = 15,
Execution Time = 31155864626, Total Traces Read = 10000000106
Flush time = 503448722
Total time (Execution Time + Flush Time) = 31659313348
Number of Reference Types: [Percentage]
   Reads = 2689845793
                                 [26.9%]
   Writes = 580065162
                                  [5.8%]
   Inst. = 6730089151
                                  [67.3%]
   Total = 10000000106
                              [Percentage]
Total Cycles for Activities:
   Reads = 11682370933
                                 [37.5%]
   Writes = 3286563446
                                  [10.5\%]
   Inst. = 16186930247
                                  [52.0%]
   Total = 31155864626
Average Cycles for Activities:
   Reads = 4.3, Writes = 5.7, Instructions = 4.6
Ideal: Execution Time = 16730089257;
                                    CPI = 2.5
Ideal Misaligned Execution Time = 21962901365; CPI = 3.3
Memory Level: L1 Instruction Cache
   Hit Count = 11142163567, Miss Count = 65913321
   Total Requests = 11208076888
   Hit Rate: 99.4%, Miss Rate = 0.6%
   Kickouts = 63630194, Dirty-kickouts = 0, Transfers = 65913321
   Flush Kickouts = 0
Memory Level: L1 Data Cache
   Hit Count = 3901584895,
                               Miss Count = 123150431
   Total Requests = 4024735326
   Hit Rate: 96.9%, Miss Rate = 3.1% Kickouts = 91898240, Dirty-kickout
                          Dirty-kickouts = 27883779, Transfers = 123150431
   Flush Kickouts = 910877
Memory Level: L2 Cache
   Hit Count = 152954502, Miss Count = 64903906
   Total Requests = 217858408
   Hit Rate: 70.2%, Miss Rate = 29.8% Kickouts = 44091896, Dirty-kickouts
                          Flush Kickouts = 2688540
System Costs:
     L1 Cache Costs (Instruction Cache $300 + Data Cache $300) = $600
    L2 Cache Costs: $50
    Main Memory Costs: $75
    Total Memory Cost: $725
Flushes = 26315, Invalidates = 15778061
```