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Configuration: config/l1-2way 16
               Simulation Results
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Memory System:
    D Cache: Size = 8192, Associativity = 2, Block size = 32
     I Cache: Size = 8192, Associativity = 2, Block size = 32
    L2 Unified Cache: Size = 32768, Associativity = 1, Block size = 64
    Main Memory: Ready time = 30, Chunksize = 16,
                                                   Chunktime = 15,
Execution Time = 38179701058, Total Traces Read = 10000000109
Flush time = 569950942
Total time (Execution Time + Flush Time) = 38749652000
Number of Reference Types: [Percentage]
   Reads = 1907768017
                                 [19.1\%]
   Writes = 727693598
                                  [7.3%]
   Inst. = 7364538494
                                  [73.6%]
   Total = 10000000109
                              [Percentage]
Total Cycles for Activities:
   Reads = 9306404272
                                 [24.4%]
   Writes = 5406903831
                                  [14.2\%]
   Inst. = 23466392955
                                  [61.5%]
   Total = 38179701058
Average Cycles for Activities:
   Reads = 4.9, Writes = 7.4, Instructions = 5.2
Ideal: Execution Time = 17364538603; CPI = 2.4
Ideal Misaligned Execution Time = 23214492795; CPI = 3.2
Memory Level: L1 Instruction Cache
   Hit Count = 12328417929, Miss Count = 223957863
   Total Requests = 12552375792
   Hit Rate: 98.2%, Miss Rate = 1.8%
   Kickouts = 217282337, Dirty-kickouts = 0, Transfers = 223957863
   Flush Kickouts = 0
Memory Level: L1 Data Cache
   Hit Count = 3175293706,
                               Miss Count = 122284803
   Total Requests = 3297578509
   Hit Rate: 96.3%, Miss Rate = 3.7%

Kickouts = 62676901, Dirty-kickouts = 52965730, Transfers = 122284803
   Flush Kickouts = 3039609
Memory Level: L2 Cache
   Hit Count = 274662811, Miss Count = 127585194
   Total Requests = 402248005
   Hit Rate: 68.3%, Miss Rate = 31.7%
Kickouts = 90773131, Dirty-kickouts
                          Flush Kickouts = 3707261
System Costs:
     L1 Cache Costs (Instruction Cache $400 + Data Cache $400) = $800
    L2 Cache Costs: $50
    Main Memory Costs: $75
    Total Memory Cost: $925
Flushes = 26315, Invalidates = 24984871
```