## Simpleloop

| memsize=50 | Random | FIFO | LRU | Clock |
|---|---|---|---|---|
| **Hit Rate** | 70.60% | 71.06% | 72.85% | 72.76% |
| **Hit Count** | 7246 | 7294 | 7477 | 7468 |
| **Miss Count** | 3018 | 2970 | 2787 | 2796 |
| **Eviction Count** | 2968 | 2920 | 2737 | 2746 |
| **# Clean Evictions** | 383 | 322 | 209 | 215 |
| **# Dirty Evictions** | 2585 | 2598 | 2528 | 2531 |

| memsize=100 | Random | FIFO | LRU | Clock |
|---|---|---|---|---|
| **Hit Rate** | 73.05% | 73.11% | 73.84% | 73.80% |
| **Hit Count** | 7498 | 7504 | 7579 | 7575 |
| **Miss Count** | 2766 | 2760 | 2685 | 2689 |
| **Eviction Count** | 2666 | 2660 | 2585 | 2589 |
| **# Clean Evictions** | 174 | 165 | 119 | 122 |
| **# Dirty Evictions** | 2492 | 2495 | 2466 | 2467 |

## Matmul

| memsize=50 | Random | FIFO | LRU | Clock |
|---|---|---|---|---|
| **Hit Rate** | 65.54% | 60.67% | 63.95% | 63.94% |
| **Hit Count** | 1892659 | 1760677 | 1846720 | 1846688 |
| **Miss Count** | 995293 | 1127275 | 1041232 | 1041264 |
| **Eviction Count** | 995243 | 1127225 | 1041182 | 1041214 |
| **# Clean Evictions** | 955816 | 1083364 | 1040203 | 1040230 |
| **# Dirty Evictions** | 39427 | 43861 | 979 | 984 |

| memsize=100 | Random | FIFO | LRU | Clock |
|---|---|---|---|---|
| **Hit Rate** | 88.82% | 62.48% | 65.15% | 63.95% |
| **Hit Count** | 2565035 | 1804403 | 1881496 | 1846842 |
| **Miss Count** | 322917 | 1083549 | 1006456 | 1041110 |
| **Eviction Count** | 322817 | 1083449 | 1006356 | 1041010 |
| **# Clean Evictions** | 315464 | 1061347 | 1005395 | 1040047 |
| **# Dirty Evictions** | 7353 | 22102 | 961 | 963 |

Comparison:

Out of the three non-random algorithms (FIFO, LRU and Clock), LRU consistently performs the best, having the highest hit-rate among the three non-random algorithms for both simpleloop and matmul running on either memsize (50 or 100). For random, we can see that it performs slightly worse than the three non-random algorithms when running simpleloop on either memory size. However, when running matmul, we can see that random performs much better than the three non-random algorithms on both memory sizes. Overall, LRU was the best for running simpleloop while random was the best for running matmul.