Grayson Colwell and Jessica Cashman

Direct Mapped Table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Direct Mapped | | | | | |
| Naïve Program | | | Smart Program | | |
| # of cycle | # of misses | Miss rate | # of cycle | # of misses | Miss rate |
| N=6 | 43256 | 192 | 22.22% | 39616 | 157 | 18.17% |
| N=16 | 1252608 | 7840 | 47.85% | 1142784 | 6784 | 41.41% |
| N=25 | 4486392 | 26988 | 43.18% | 3661880 | 19060 | 30.50% |

Two-Way Associative Table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Two-Way Associative | | | | | |
| Naïve Program | | | Smart Program | | |
| # of cycle | # of misses | Miss rate | # of cycle | # of misses | Miss rate |
| N=6 | 57064 | 325 | 37.62% | 44678 | 206 | 23.84% |
| N=16 | 1185650 | 7187 | 43.87% | 1212374 | 7468 | 45.58% |
| N=25 | 4561234 | 27718 | 44.35% | 3554024 | 18014 | 28.82% |

Fully Associative Table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Fully Associative | | | | | |
| Naïve Program | | | Smart Program | | |
| # of cycle | # of misses | Miss rate | # of cycle | # of misses | Miss rate |
| N=6 | 51474 | 271 | 31.37% | 37414 | 136 | 15.74% |
| N=16 | 1044636 | 5793 | 35.36% | 838960 | 3827 | 23.36% |
| N=25 | 4251680 | 24676 | 39.48% | 3456280 | 17076 | 27.32% |