Chapter22

1. 使用以下参数生成随机地址: -s 0 -n 10, -s 1 -n 10 和-s 2 -n 10。将策略从 FIFO 更改为 LRU,并将 其更改为 OPT。计算所述地址追踪中的每个访问是否命中或未命中。

-s 0 -n 10:

```
./paging-policy.py -s 0 -n 10 -p FIFO -c
ARG addresses -1
ARG addressfile
ARG numaddrs 10
ARG policy FIFO
ARG clockbits 2
ARG cachesize 3
ARG maxpage 10
ARG seed 0
ARG notrace False
Access: 8 Hit/Miss? MISS [8]
Access: 7 Hit/Miss? MISS [8, 7]
Access: 4 Hit/Miss? MISS [8, 7, 4]
Access: 2 Hit/Miss? MISS [7, 4, 2]
Access: 5 Hit/Miss? MISS [4, 2, 5]
Access: 4 Hit/Miss? HIT [4, 2, 5]
Access: 7 Hit/Miss? MISS [2, 5, 7]
Access: 3 Hit/Miss? MISS [5, 7, 3]
Access: 4 Hit/Miss? MISS [7, 3, 4]
Access: 5 Hit/Miss? MISS [3, 4, 5]
./paging-policy.py -s 0 -n 10 -p LRU -c
ARG addresses -1
ARG addressfile
ARG numaddrs 10
ARG policy LRU
ARG clockbits 2
ARG cachesize 3
ARG maxpage 10
ARG seed 0
ARG notrace False
Access: 8 Hit/Miss? MISS
                             [8]
Access: 7 Hit/Miss? MISS [8, 7]
Access: 4 Hit/Miss? MISS [8, 7, 4]
Access: 2 Hit/Miss? MISS [7, 4, 2]
Access: 5 Hit/Miss? MISS [4, 2, 5]
Access: 4 Hit/Miss? HIT [2, 5, 4]
```

```
Access: 7 Hit/Miss? MISS [5, 4, 7]
Access: 3 Hit/Miss? MISS [4, 7, 3]
Access: 4 Hit/Miss? HIT [7, 3, 4]
Access: 5 Hit/Miss? MISS [3, 4, 5]
./paging-policy.py -s 0 -n 10 -p OPT -c
ARG addresses -1
ARG addressfile
ARG numaddrs 10
ARG policy OPT
ARG clockbits 2
ARG cachesize 3
ARG maxpage 10
ARG seed 0
ARG notrace False
Access: 8 Hit/Miss? MISS [8]
Access: 7 Hit/Miss? MISS [8, 7]
Access: 4 Hit/Miss? MISS [8, 7, 4]
Access: 2 Hit/Miss? MISS [7, 4, 2]
Access: 5 Hit/Miss? MISS [7, 4, 5]
Access: 4 Hit/Miss? HIT [7, 4, 5]
Access: 7 Hit/Miss? HIT [7, 4, 5]
Access: 3 Hit/Miss? MISS [4, 5, 3]
Access: 4 Hit/Miss? HIT [4, 5, 3]
Access: 5 Hit/Miss? HIT [4, 5, 3]
```

-s 1 -n 10:

```
./paging-policy.py -s 1 -n 10 -p FIFO -c
ARG addresses -1
ARG addressfile
ARG numaddrs 10
ARG policy FIFO
ARG clockbits 2
ARG cachesize 3
ARG maxpage 10
ARG seed 1
ARG notrace False
Access: 1 Hit/Miss? MISS [1]
Access: 8 Hit/Miss? MISS [1, 8]
Access: 7 Hit/Miss? MISS [1, 8, 7]
Access: 2 Hit/Miss? MISS [8, 7, 2]
Access: 4 Hit/Miss? MISS [7, 2, 4]
Access: 4 Hit/Miss? HIT [7, 2, 4]
```

```
Access: 6 Hit/Miss? MISS [2, 4, 6]
Access: 7 Hit/Miss? MISS [4, 6, 7]
Access: 0 Hit/Miss? MISS [6, 7, 0]
Access: 0 Hit/Miss? HIT [6, 7, 0]
./paging-policy.py -s 1 -n 10 -p LRU -c
ARG addresses -1
ARG addressfile
ARG numaddrs 10
ARG policy LRU
ARG clockbits 2
ARG cachesize 3
ARG maxpage 10
ARG seed 1
ARG notrace False
Access: 1 Hit/Miss? MISS
                                [1]
Access: 8 Hit/Miss? MISS [1, 8]
Access: 7 Hit/Miss? MISS [1, 8, 7]
Access: 2 Hit/Miss? MISS [8, 7, 2]
Access: 4 Hit/Miss? MISS [7, 2, 4]
Access: 4 Hit/Miss? HIT [7, 2, 4]
Access: 6 Hit/Miss? MISS [2, 4, 6]
Access: 7 Hit/Miss? MISS [4, 6, 7]
Access: 0 Hit/Miss? MISS [6, 7, 0]
Access: 0 Hit/Miss? HIT [6, 7, 0]
./paging-policy.py -s 1 -n 10 -p OPT -c
ARG addresses -1
ARG addressfile
ARG numaddrs 10
ARG policy OPT
ARG clockbits 2
ARG cachesize 3
ARG maxpage 10
ARG seed 1
ARG notrace False
Access: 1 Hit/Miss? MISS
                                [1]
Access: 8 Hit/Miss? MISS
                         [1, 8]
Access: 7 Hit/Miss? MISS [1, 8, 7]
Access: 2 Hit/Miss? MISS [1, 7, 2]
Access: 4 Hit/Miss? MISS [1, 7, 4]
Access: 4 Hit/Miss? HIT [1, 7, 4]
Access: 6 Hit/Miss? MISS [1, 7, 6]
Access: 7 Hit/Miss? HIT [1, 7, 6]
Access: 0 Hit/Miss? MISS [1, 7, 0]
```

```
Access: 0 Hit/Miss? HIT [1, 7, 0]
```

-s 2 -n 10:

```
./paging-policy.py -s 2 -n 10 -p FIFO -c
ARG addresses -1
ARG addressfile
ARG numaddrs 10
ARG policy FIFO
ARG clockbits 2
ARG cachesize 3
ARG maxpage 10
ARG seed 2
ARG notrace False
Access: 9 Hit/Miss? MISS
                            [9]
Access: 9 Hit/Miss? HIT
                              [9]
Access: 0 Hit/Miss? MISS
                           [9, 0]
Access: 0 Hit/Miss? HIT [9, 0]
Access: 8 Hit/Miss? MISS [9, 0, 8]
Access: 7 Hit/Miss? MISS [0, 8, 7]
Access: 6 Hit/Miss? MISS [8, 7, 6]
Access: 3 Hit/Miss? MISS [7, 6, 3]
Access: 6 Hit/Miss? HIT [7, 6, 3]
Access: 6 Hit/Miss? HIT [7, 6, 3]
./paging-policy.py -s 2 -n 10 -p LRU -c
ARG addresses -1
ARG addressfile
ARG numaddrs 10
ARG policy LRU
ARG clockbits 2
ARG cachesize 3
ARG maxpage 10
ARG seed 2
ARG notrace False
Access: 9 Hit/Miss? MISS [9]
Access: 9 Hit/Miss? HIT
                              [9]
                           [9, 0]
Access: 0 Hit/Miss? MISS
Access: 0 Hit/Miss? HIT [9, 0]
Access: 8 Hit/Miss? MISS [9, 0, 8]
Access: 7 Hit/Miss? MISS [0, 8, 7]
Access: 6 Hit/Miss? MISS [8, 7, 6]
Access: 3 Hit/Miss? MISS [7, 6, 3]
Access: 6 Hit/Miss? HIT [7, 3, 6]
```

```
Access: 6 Hit/Miss? HIT [7, 3, 6]
./paging-policy.py -s 2 -n 10 -p OPT -c
ARG addresses -1
ARG addressfile
ARG numaddrs 10
ARG policy OPT
ARG clockbits 2
ARG cachesize 3
ARG maxpage 10
ARG seed 2
ARG notrace False
Access: 9 Hit/Miss? MISS [9]
Access: 9 Hit/Miss? HIT [9]
Access: 0 Hit/Miss? MISS [9, 0]
Access: 0 Hit/Miss? HIT [9, 0]
Access: 8 Hit/Miss? MISS [9, 0, 8]
Access: 7 Hit/Miss? MISS [9, 0, 7]
Access: 6 Hit/Miss? MISS [9, 0, 6]
Access: 3 Hit/Miss? MISS [9, 6, 3]
Access: 6 Hit/Miss? HIT [9, 6, 3]
Access: 6 Hit/Miss? HIT [9, 6, 3]
```