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CS 361

HW 3

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CS 361: ANALYSIS for HW 3

The following contains some reports about the hits and misses resulting in different memory accesses and frame table sizes for various files. It is clear that you get more hits than misses when the infinite memory algorithm is applied. And the larger your frame table gets the more hits you have for the FIFO algorithm since you’re less likely to kick out a frame. Files such as VRUPL\_Logo had tons of hits and a small percentage of misses because it only has like 3-4 actual colors of the same hex value. These values make sense because for FIFO, the smaller the frame table the more times we’ll evict a victim page and the less variety of pixels an image file has, the more page hits we’ll get since we’re accessing the same page over and over again. **The last pages contain charts of some of these results run with different frame table sizes.**

Chevalier\_473.raw

**0 memory accesses:**

**100 frames:**

INFINITE

992311 total hits

60319 total misses

FIFO

986116 total hits

66524 total misses

**400 frames**

INFINITE

992311 total hits

60319 total misses

FIFO

986116 total hits

66524 total misses

**5000 memory accesses:**

**100 frames:**

INFINITE

1394 total hits

3606 total misses

FIFO

1333 total hits

3667 total misses

**400 frames:**

INFINITE

1394 total hits

3606 total misses

FIFO

1331 total hits

3669 total misses

Chevalier\_Gray.bmp

**0 memory accesses:**

**100 frames:**

INFINITE

1027390 total hits

25276 total misses

FIFO

1026866 total hits

25801 total misses

**400 frames**

INFINITE

1027365 total hits

25301 total misses

FIFO

1026768 total hits

25899 total misses

**5000 memory accesses:**

**100 frames:**

INFINITE

3763 total hits

1237 total misses

FIFO

3761 total hits

1239 total misses

**400 frames:**

INFINITE

3763 total hits

1237 total misses

FIFO

3762 total hits

1238 total misses

Light\_drops.bmp

**0 memory accesses:**

**100 frames:**

INFINITE

18955 total hits

5649 total misses

FIFO

18775 total hits

5829 total misses

**400 frames**

INFINITE

18955 total hits

5649 total misses

FIFO

18777 total hits

5827 total misses

**5000 memory accesses:**

**100 frames:**

INFINITE

2478 total hits

2522 total misses

FIFO

2439 total hits

2561 total misses

**400 frames:**

INFINITE

2478 total hits

2522 total misses

FIFO

2441 total hits

2559 total misses

VRUPL\_Logo.raw

**0 memory accesses:**

**100 frames:**

INFINITE

7606193 total hits

8687 total misses

FIFO

7577725 total hits

37155 total misses

**400 frames**

INFINITE

7606051 total hits

8818 total misses

FIFO

7564035 total hits

50845 total misses

**5000 memory accesses:**

**100 frames:**

INFINITE

4986 total hits

14 total misses

FIFO

4986 total hits

14 total misses

**400 frames:**

INFINITE

4986 total hits

14 total misses

FIFO

4986 total hits

14 total misses



