John Kelly Jr
Project 3: VM Simulator

## OPT on gcc

| Number of Frames | Page Faults | Writes |
| --- | --- | --- |
| 8 | 118,480 | 10,271 |
| 16 | 80,307 | 7,669 |
| 32 | 55,802 | 5,422 |
| 64 | 38,050 | 3,712 |
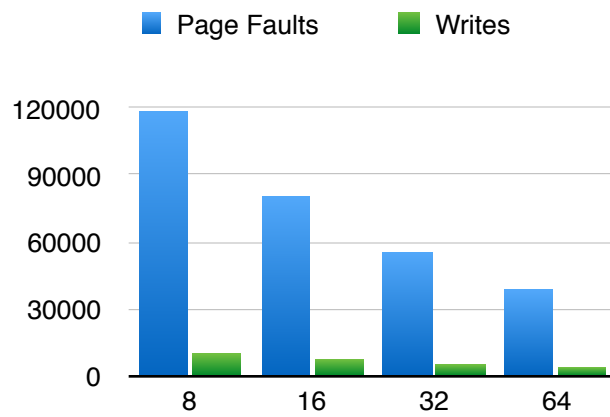
■ Page Faults    ■ Writes



## OPT on bzip

| Number of Frames | Page Faults | Writes |
| --- | --- | --- |
| 8 | 18,251 | 3,647 |
| 16 | 2,427 | 310 |
| 32 | 1,330 | 205 |
| 64 | 821 | 143 |
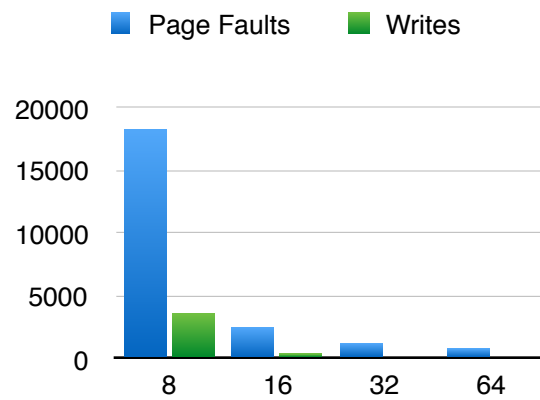
## Clock on gcc

| Number of Frames | Page Faults | Writes |
|:---:|:---:|:---:|
| 8 | 181,856 | 18,285 |
| 16 | 121,682 | 10,703 |
| 32 | 87,686 | 8,215 |
| 64 | 61,640 | 6,007 |

## Clock on bzip

| Number of Frames | Page Faults | Writes |
|:---:|:---:|:---:|
| 8 | 46,164 | 6,973 |
| 16 | 3,468 | 412 |
| 32 | 2,203 | 294 |
| 64 | 1,318 | 224 |

## NRU on gcc using 8 frames

| Refresh Rate | Number of Frames | Number of Frames |
|---|---|---|
| 1 | | |
| 2 | | |
| 16 | | |
| 32 | | |
| 64 | | |
| 128 | | |

Writeup: I was unable to finish the random page replacement algorithm, and I was unable to completely debug my NRU algorithm. I would assume that the NRU algorithm performed best due to the refreshing property of NRU, but I was unable to verify my assumption.