Assignment 3

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Question 7:

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| Algorithm Type | Command File | Page Faults / Memory accesses |
| FIFO | cmdFile1 | 480 / 1303 = 36.8% |
| FIFO | cmdFile2 | 11 / 202 = 5.4% |
| LRU | cmdFile1 | 376 / 1303 = 28.9% |
| LRU | cmdFile2 | 9 / 202 = 4.5% |
| CLOCK | cmdFile1 | 376 / 1303 = 28.9% |
| CLOCK | cmdFile2 | 9 / 202 = 4.5% |

It would seem both LRU and CLOCK performed equally well, having the fewest number of page faults per memory access attempts in both cases. However, the difference between LRU or CLOCK and FIFO is not very large.

Question 8:

Using cmdFile1 for all tests,

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| Algorithm Type | Configuration File | Page Faults per 1303 Memory Accesses |
| FIFO | confFile1 | 480 |
| FIFO | confFile2 | 52 |
| FIFO | confFile3 | 43 |
| FIFO | confFile4 | 23 |
| FIFO | confFile5 | 16 |
| LRU | confFile1 | 376 |
| LRU | confFile2 | 48 |
| LRU | confFile3 | 39 |
| LRU | confFile4 | 16 |
| LRU | confFile5 | 8 |
| CLOCK | confFile1 | 376 |
| CLOCK | confFile2 | 47 |
| CLOCK | confFile3 | 38 |
| CLOCK | confFile4 | 18 |
| CLOCK | confFile5 | 9 |

In this case, when using cmdFile1 and testing all combinations of confFiles with Algorithms, it seems to show that LRU is the best algorithm, though only by a very small margin. Once again, FIFO was worst but much better for confFiles 2 – 5, when compared to using confFile1 with cmdFile2. This implies that increasing the physical memory size and thus the frame size has a drastic effect on the number of page faults generated.