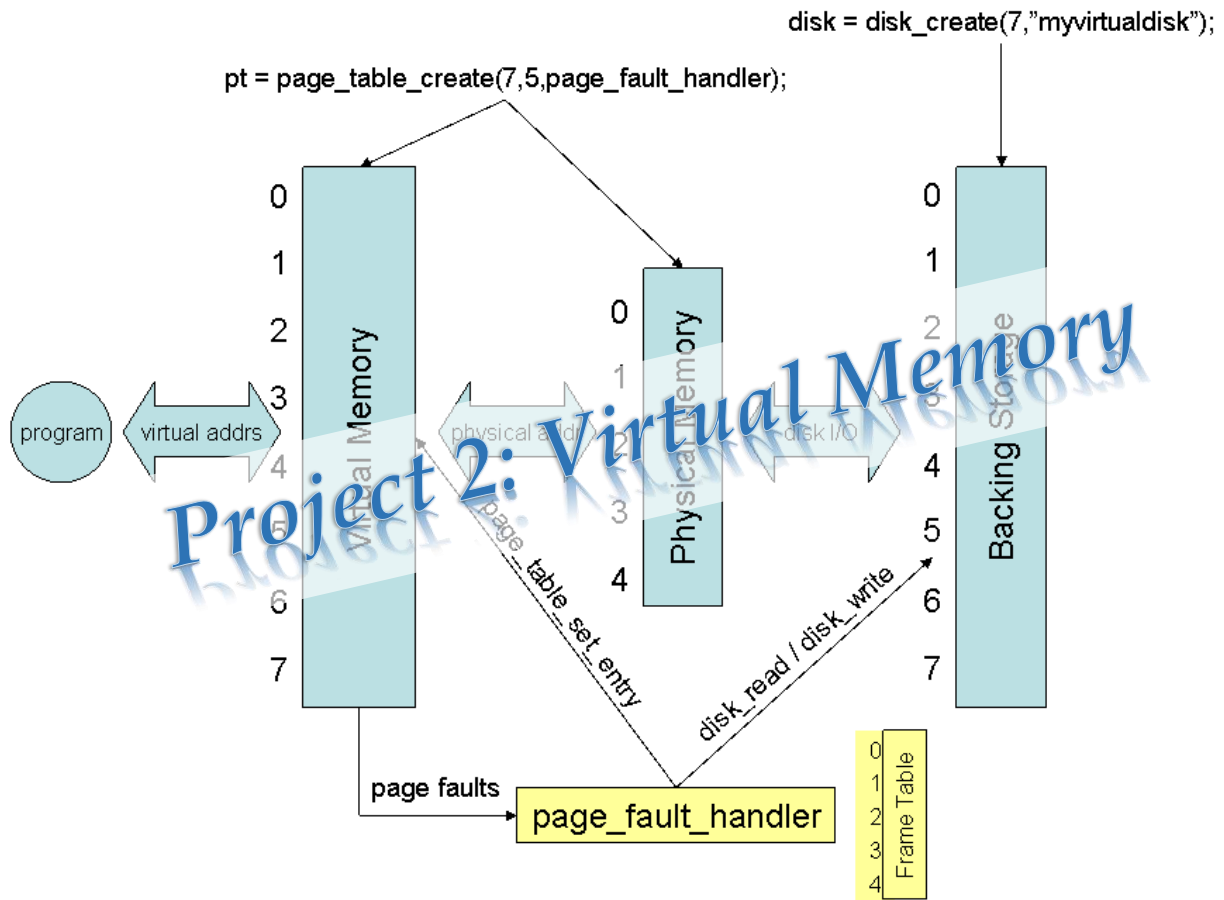


CS 537 - Introduction to Operating Systems



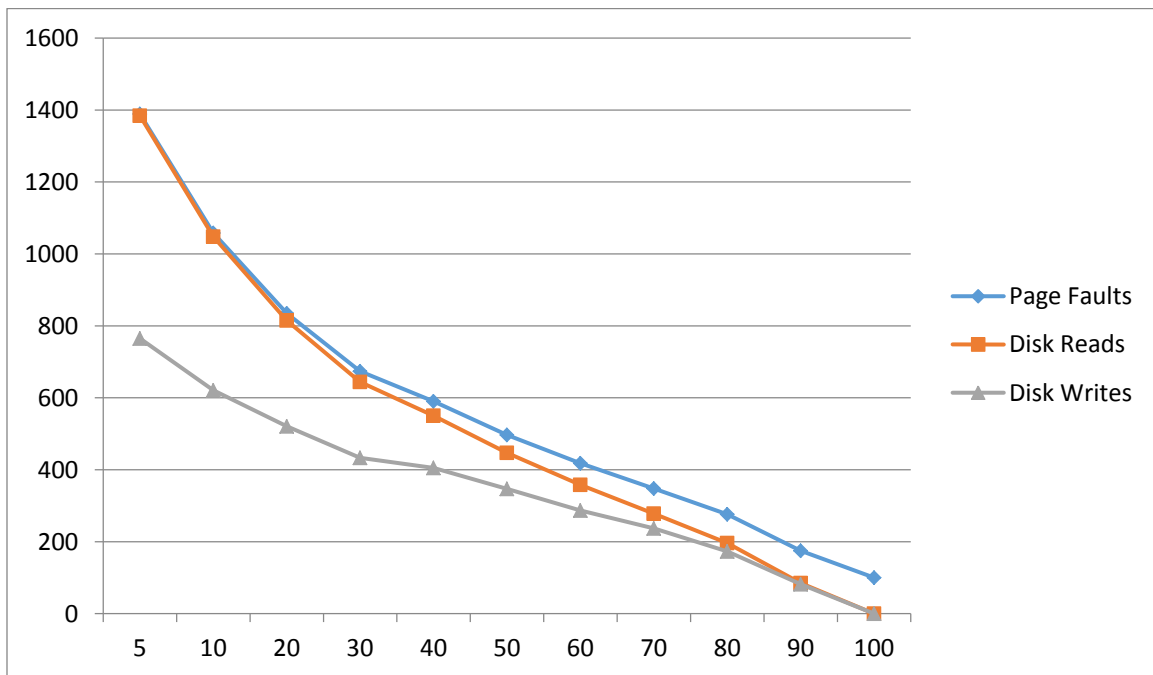
Detailed Analysis of Results (for # of pages = 10)



Aman Rakesh Chadha
(9068354597)

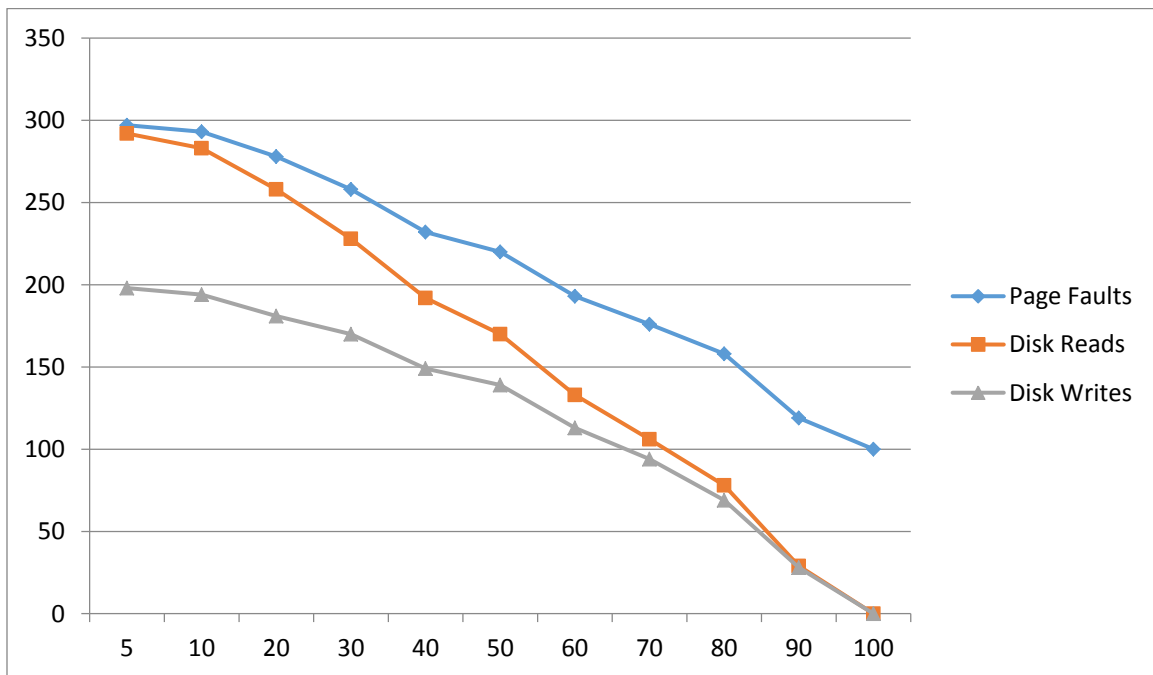
RAND: Sort

| # Frames | Page Faults | Disk Reads | Disk Writes |
|----------|-------------|------------|-------------|
| 5 | 1389 | 1384 | 765 |
| 10 | 1058 | 1048 | 621 |
| 20 | 835 | 815 | 521 |
| 30 | 674 | 644 | 433 |
| 40 | 590 | 550 | 405 |
| 50 | 497 | 447 | 347 |
| 60 | 418 | 358 | 287 |
| 70 | 348 | 278 | 237 |
| 80 | 276 | 196 | 173 |
| 90 | 175 | 85 | 82 |
| 100 | 100 | 0 | 0 |



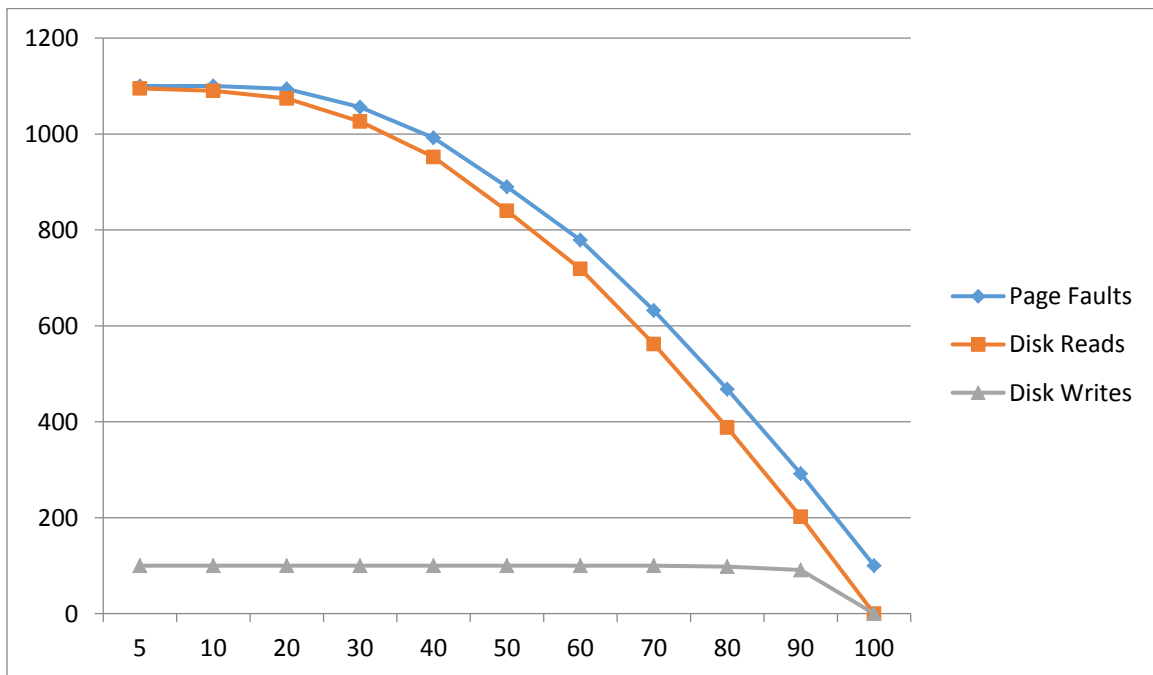
RAND: Focus

| # Frames | Page Faults | Disk Reads | Disk Writes |
|----------|-------------|------------|-------------|
| 5 | 297 | 292 | 198 |
| 10 | 293 | 283 | 194 |
| 20 | 278 | 258 | 181 |
| 30 | 258 | 228 | 170 |
| 40 | 232 | 192 | 149 |
| 50 | 220 | 170 | 139 |
| 60 | 193 | 133 | 113 |
| 70 | 176 | 106 | 94 |
| 80 | 158 | 78 | 69 |
| 90 | 119 | 29 | 28 |
| 100 | 100 | 0 | 0 |



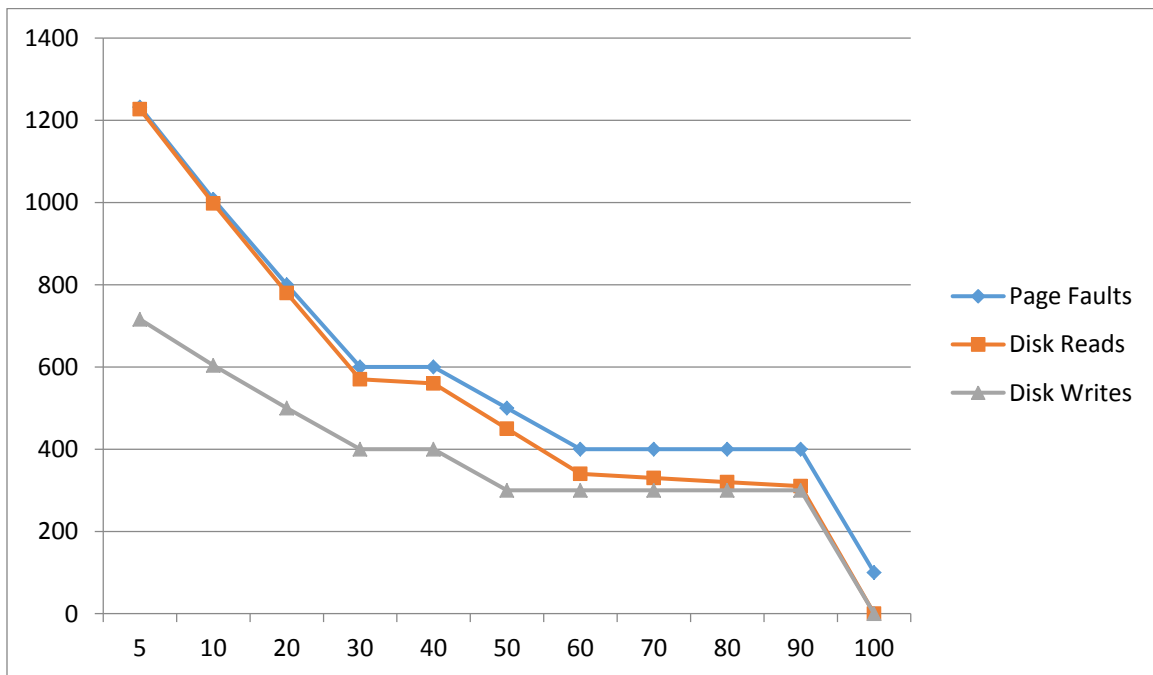
RAND: Scan

| # Frames | Page Faults | Disk Reads | Disk Writes |
|----------|-------------|------------|-------------|
| 5 | 1100 | 1095 | 100 |
| 10 | 1100 | 1090 | 100 |
| 20 | 1094 | 1074 | 100 |
| 30 | 1056 | 1026 | 100 |
| 40 | 992 | 952 | 100 |
| 50 | 890 | 840 | 100 |
| 60 | 779 | 719 | 100 |
| 70 | 632 | 562 | 100 |
| 80 | 468 | 388 | 98 |
| 90 | 292 | 202 | 91 |
| 100 | 100 | 0 | 0 |



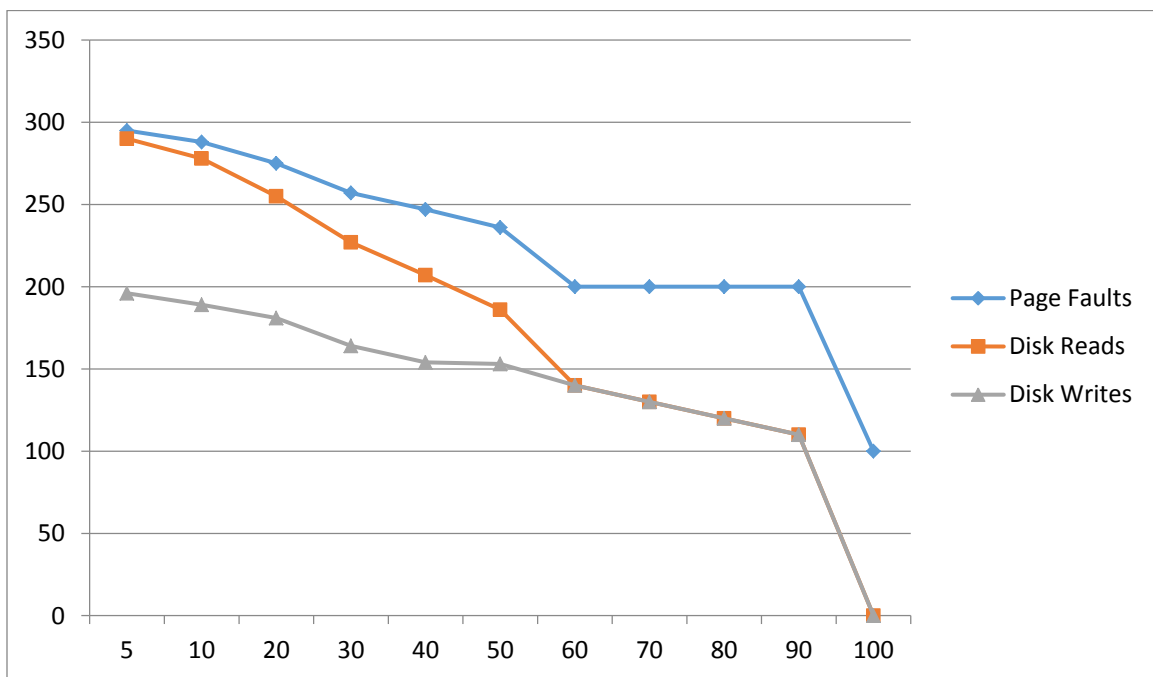
FIFO: Sort

| # Frames | Page Faults | Disk Reads | Disk Writes |
|----------|-------------|------------|-------------|
| 5 | 1232 | 1227 | 716 |
| 10 | 1008 | 998 | 604 |
| 20 | 800 | 780 | 500 |
| 30 | 600 | 570 | 400 |
| 40 | 600 | 560 | 400 |
| 50 | 500 | 450 | 300 |
| 60 | 400 | 340 | 300 |
| 70 | 400 | 330 | 300 |
| 80 | 400 | 320 | 300 |
| 90 | 400 | 310 | 300 |
| 100 | 100 | 0 | 0 |



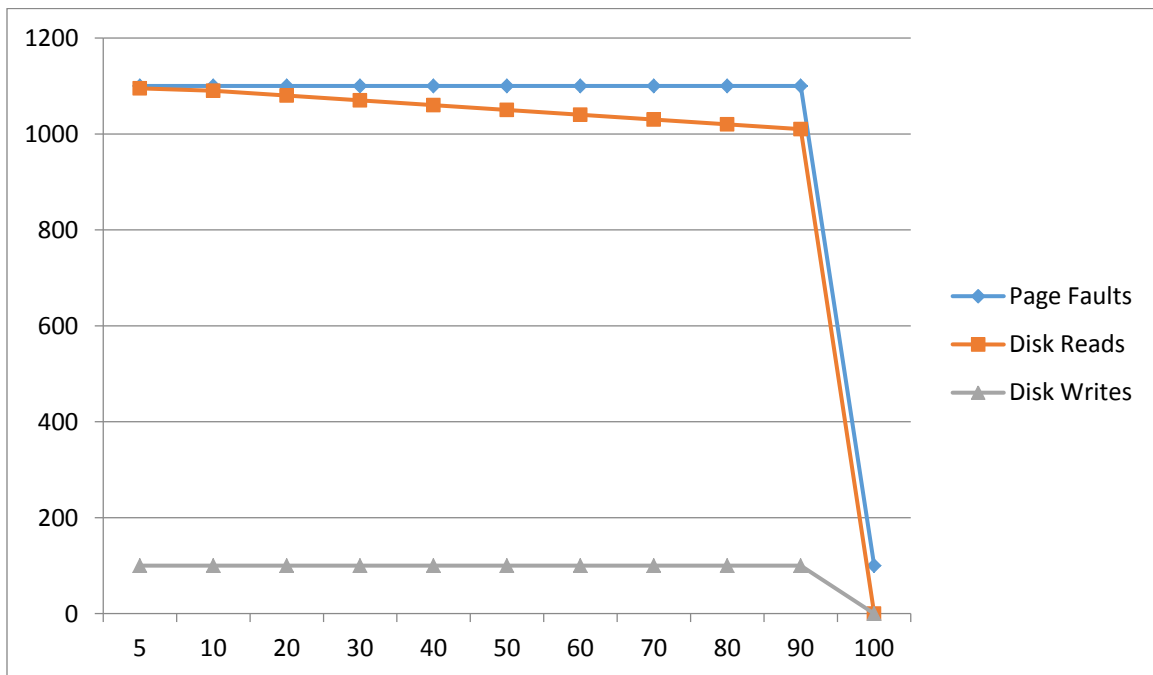
FIFO: Focus

| # Frames | Page Faults | Disk Reads | Disk Writes |
|----------|-------------|------------|-------------|
| 5 | 295 | 290 | 196 |
| 10 | 288 | 278 | 189 |
| 20 | 275 | 255 | 181 |
| 30 | 257 | 227 | 164 |
| 40 | 247 | 207 | 154 |
| 50 | 236 | 186 | 153 |
| 60 | 200 | 140 | 140 |
| 70 | 200 | 130 | 130 |
| 80 | 200 | 120 | 120 |
| 90 | 200 | 110 | 110 |
| 100 | 100 | 0 | 0 |



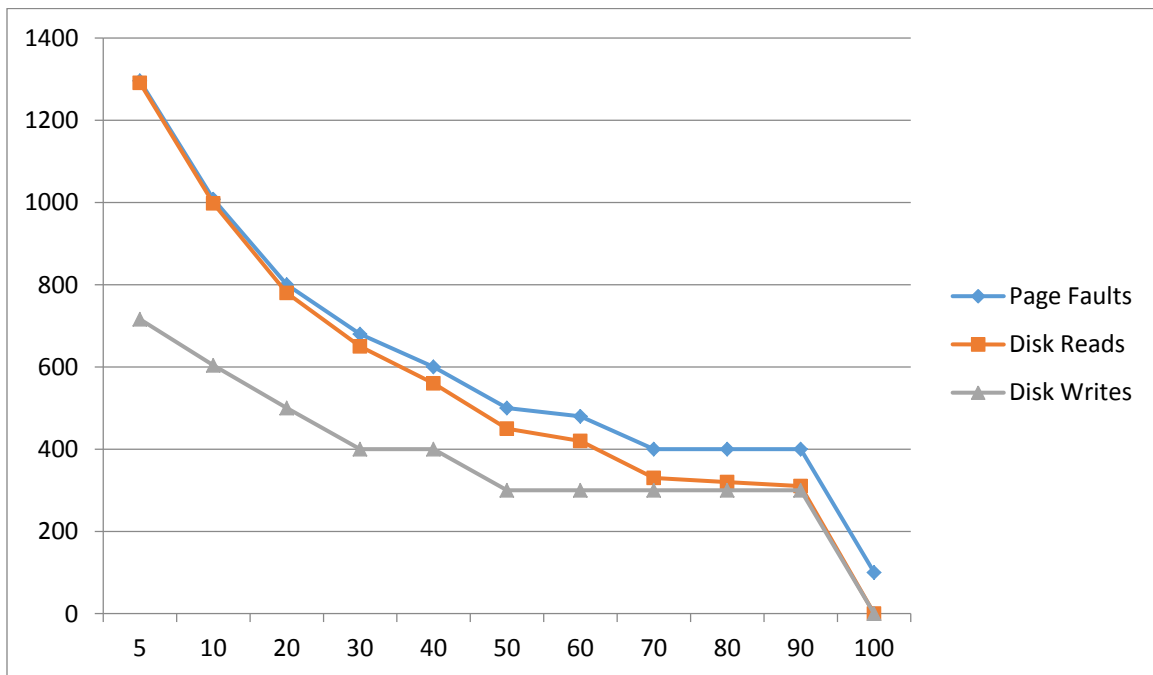
FIFO: Scan

| # Frames | Page Faults | Disk Reads | Disk Writes |
|----------|-------------|------------|-------------|
| 5 | 1100 | 1095 | 100 |
| 10 | 1100 | 1090 | 100 |
| 20 | 1100 | 1080 | 100 |
| 30 | 1100 | 1070 | 100 |
| 40 | 1100 | 1060 | 100 |
| 50 | 1100 | 1050 | 100 |
| 60 | 1100 | 1040 | 100 |
| 70 | 1100 | 1030 | 100 |
| 80 | 1100 | 1020 | 100 |
| 90 | 1100 | 1010 | 100 |
| 100 | 100 | 0 | 0 |



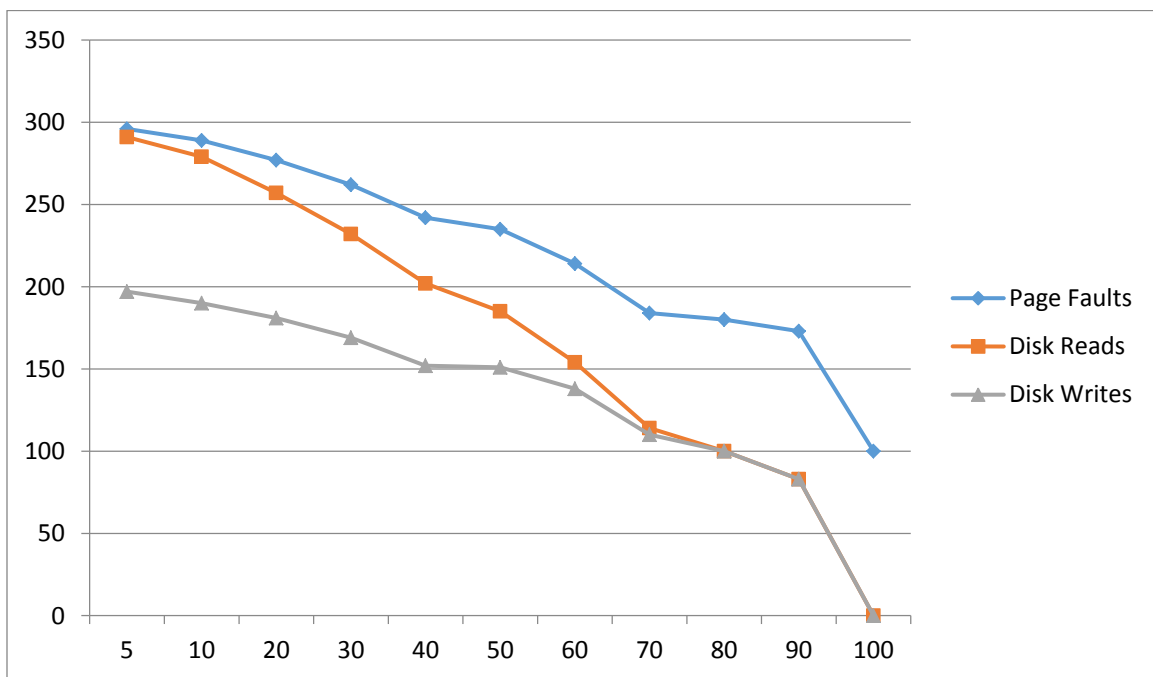
2FIFO: Sort

| # Frames | Page Faults | Disk Reads | Disk Writes |
|----------|-------------|------------|-------------|
| 5 | 1296 | 1291 | 716 |
| 10 | 1008 | 998 | 604 |
| 20 | 800 | 780 | 500 |
| 30 | 680 | 650 | 400 |
| 40 | 600 | 560 | 400 |
| 50 | 500 | 450 | 300 |
| 60 | 480 | 420 | 300 |
| 70 | 400 | 330 | 300 |
| 80 | 400 | 320 | 300 |
| 90 | 400 | 310 | 300 |
| 100 | 100 | 0 | 0 |



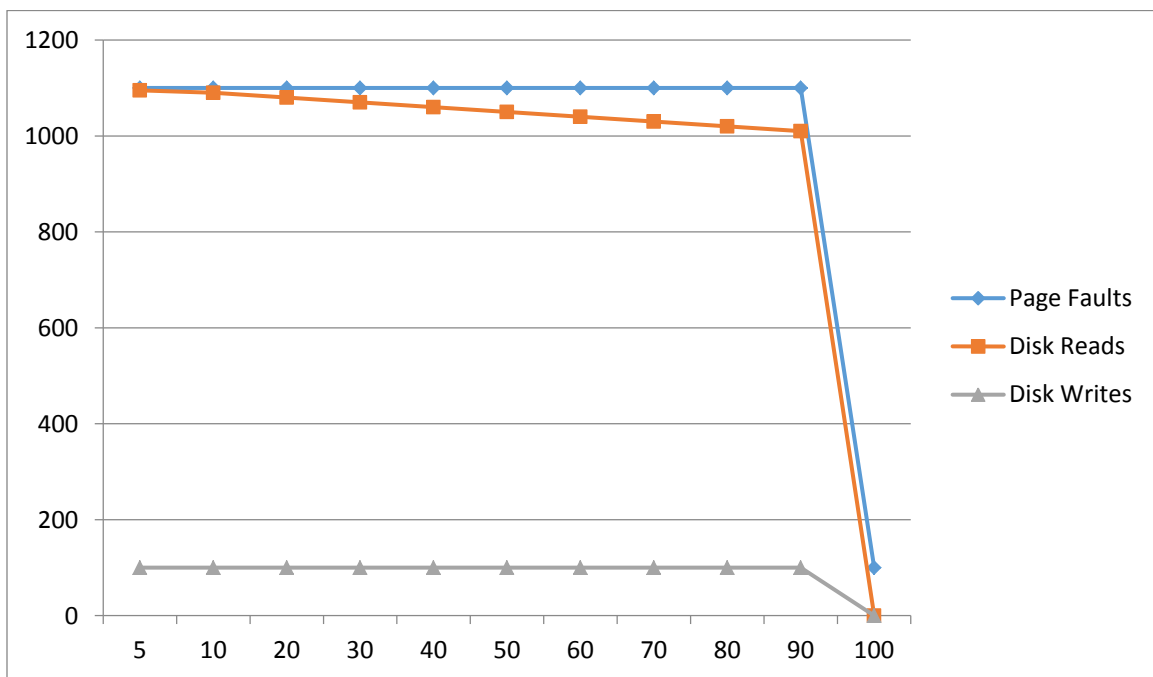
2FIFO: Focus

| # Frames | Page Faults | Disk Reads | Disk Writes |
|----------|-------------|------------|-------------|
| 5 | 296 | 291 | 197 |
| 10 | 289 | 279 | 190 |
| 20 | 277 | 257 | 181 |
| 30 | 262 | 232 | 169 |
| 40 | 242 | 202 | 152 |
| 50 | 235 | 185 | 151 |
| 60 | 214 | 154 | 138 |
| 70 | 184 | 114 | 110 |
| 80 | 180 | 100 | 100 |
| 90 | 173 | 83 | 83 |
| 100 | 100 | 0 | 0 |



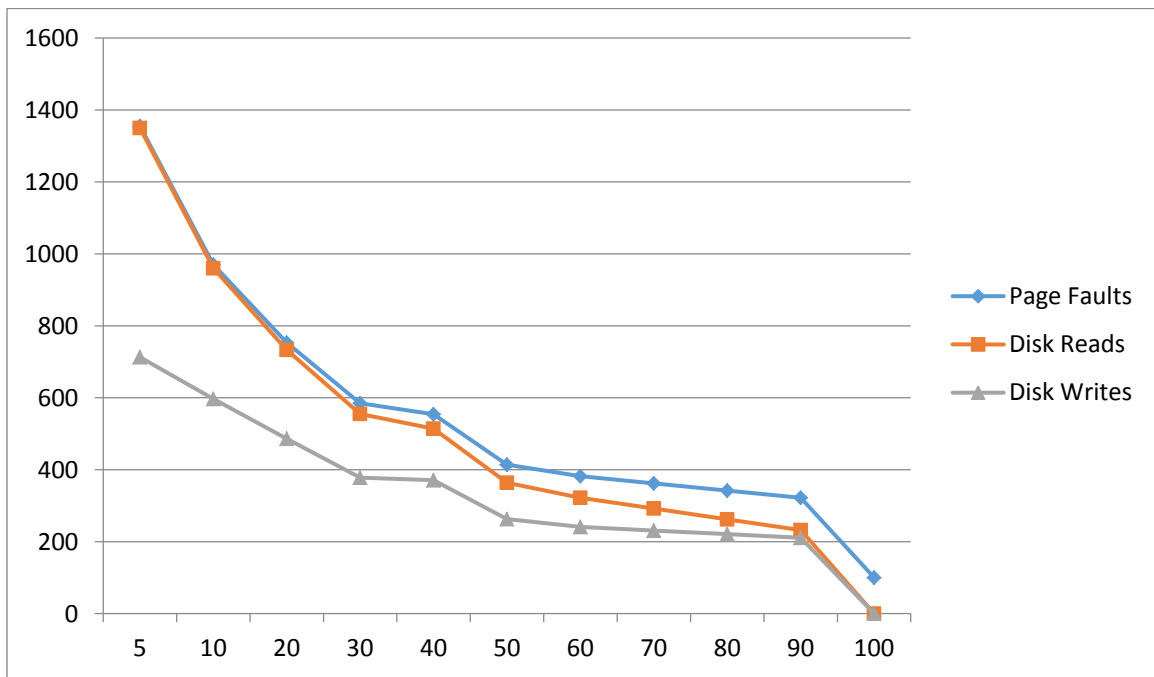
2FIFO: Scan

| # Frames | Page Faults | Disk Reads | Disk Writes |
|----------|-------------|------------|-------------|
| 5 | 1100 | 1095 | 100 |
| 10 | 1100 | 1090 | 100 |
| 20 | 1100 | 1080 | 100 |
| 30 | 1100 | 1070 | 100 |
| 40 | 1100 | 1060 | 100 |
| 50 | 1100 | 1050 | 100 |
| 60 | 1100 | 1040 | 100 |
| 70 | 1100 | 1030 | 100 |
| 80 | 1100 | 1020 | 100 |
| 90 | 1100 | 1010 | 100 |
| 100 | 100 | 0 | 0 |



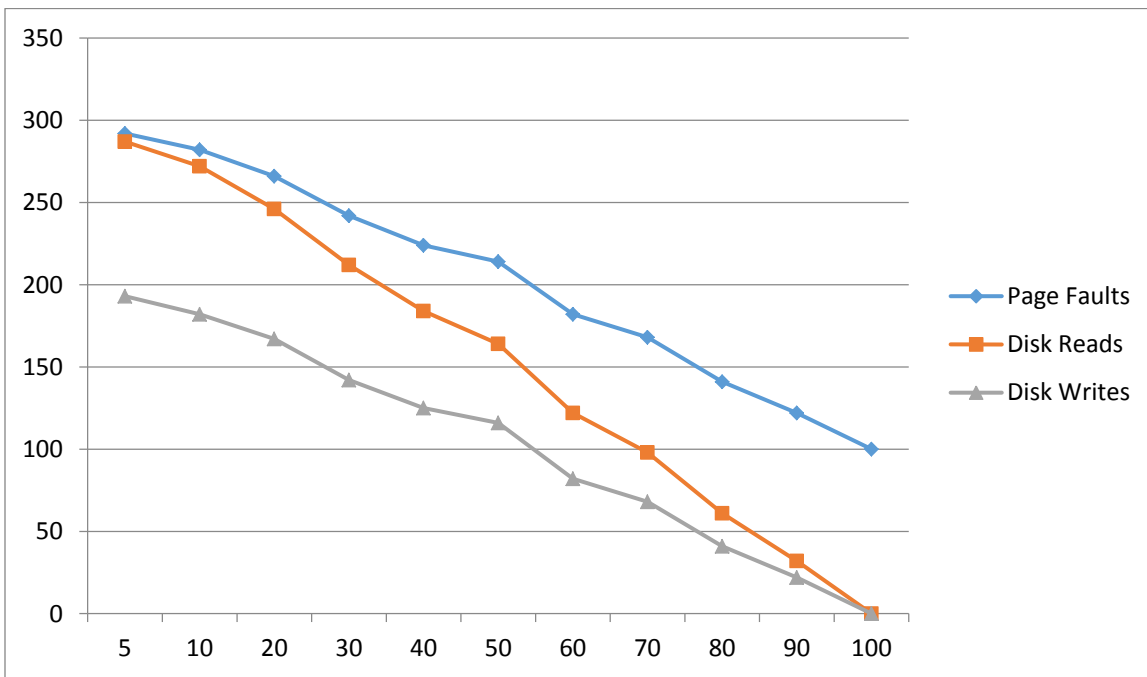
Custom: Sort

| # Frames | Page Faults | Disk Reads | Disk Writes |
|----------|-------------|------------|-------------|
| 5 | 1355 | 1350 | 713 |
| 10 | 970 | 960 | 597 |
| 20 | 753 | 733 | 486 |
| 30 | 585 | 555 | 378 |
| 40 | 554 | 514 | 371 |
| 50 | 414 | 364 | 263 |
| 60 | 382 | 322 | 241 |
| 70 | 362 | 292 | 231 |
| 80 | 342 | 262 | 221 |
| 90 | 322 | 232 | 211 |
| 100 | 100 | 0 | 0 |



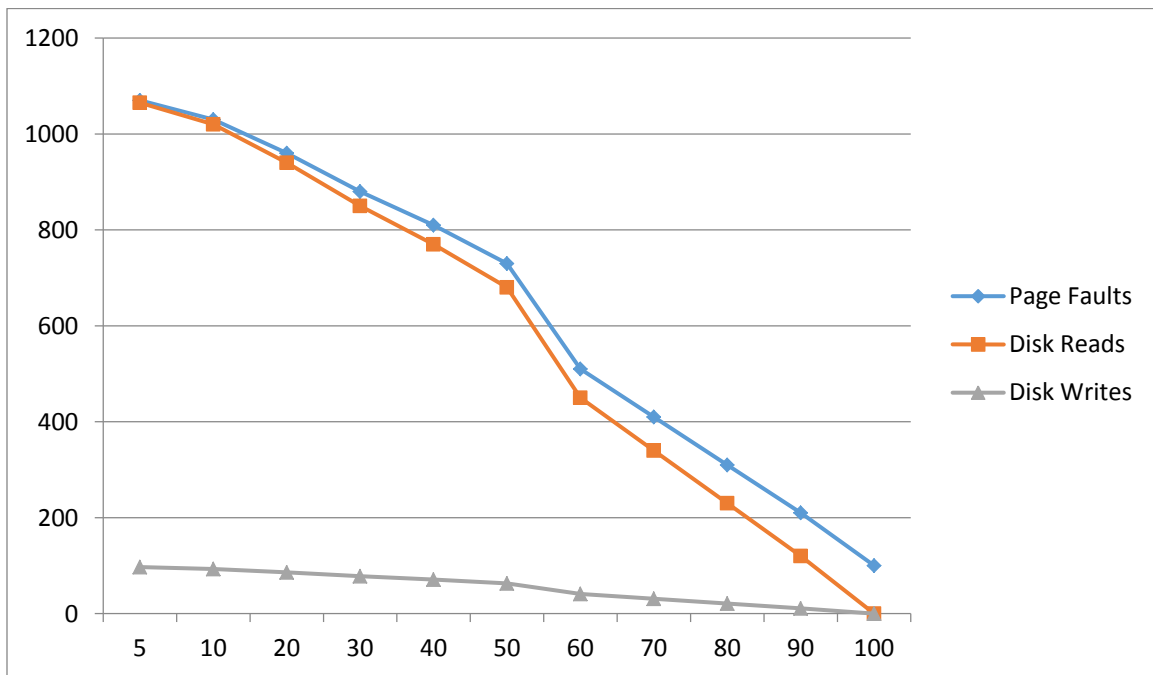
Custom: Focus

| # Frames | Page Faults | Disk Reads | Disk Writes |
|----------|-------------|------------|-------------|
| 5 | 292 | 287 | 193 |
| 10 | 282 | 272 | 182 |
| 20 | 266 | 246 | 167 |
| 30 | 242 | 212 | 142 |
| 40 | 224 | 184 | 125 |
| 50 | 214 | 164 | 116 |
| 60 | 182 | 122 | 82 |
| 70 | 168 | 98 | 68 |
| 80 | 141 | 61 | 41 |
| 90 | 122 | 32 | 22 |
| 100 | 100 | 0 | 0 |



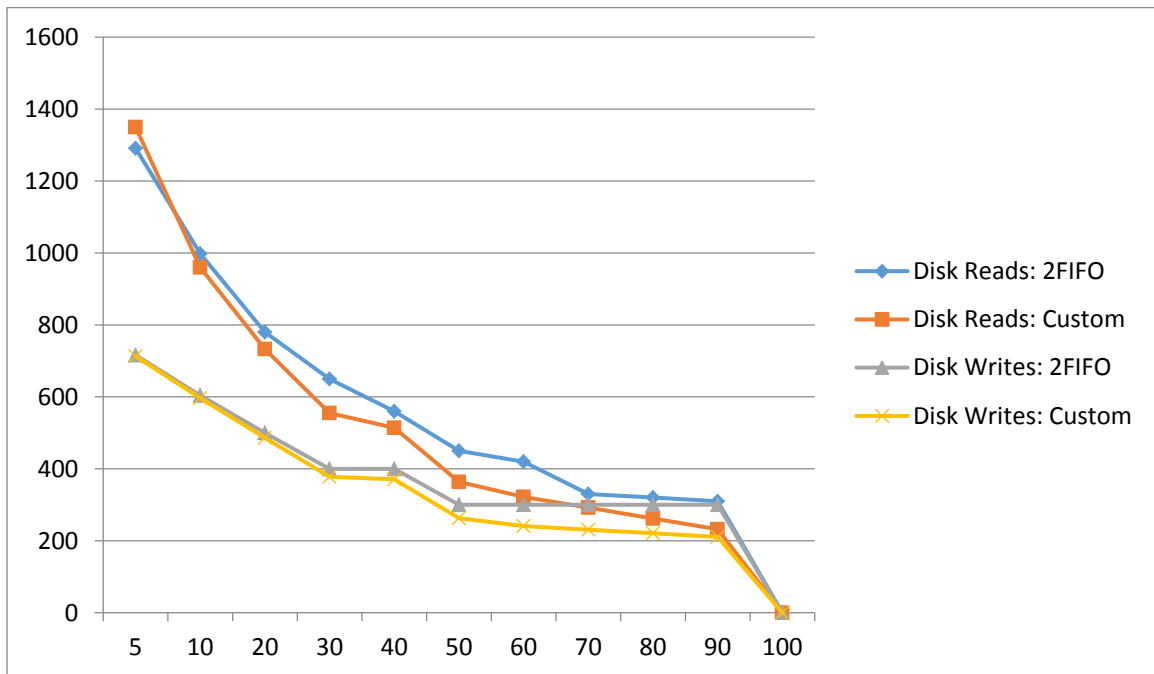
Custom: Scan

| # Frames | Page Faults | Disk Reads | Disk Writes |
|----------|-------------|------------|-------------|
| 5 | 1070 | 1065 | 97 |
| 10 | 1030 | 1020 | 93 |
| 20 | 960 | 940 | 86 |
| 30 | 880 | 850 | 78 |
| 40 | 810 | 770 | 71 |
| 50 | 730 | 680 | 63 |
| 60 | 510 | 450 | 41 |
| 70 | 410 | 340 | 31 |
| 80 | 310 | 230 | 21 |
| 90 | 210 | 120 | 11 |
| 100 | 100 | 0 | 0 |



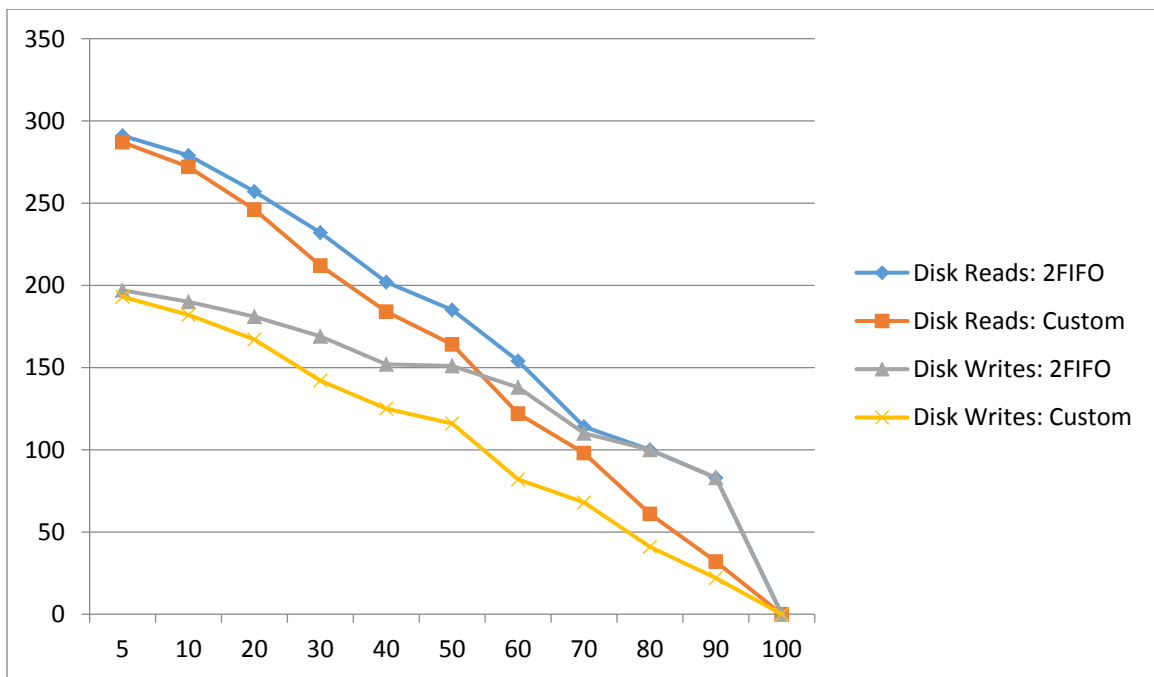
Sort

| # Frames | Disk Reads - Random | Disk Reads - FIFO | Disk Reads - 2FIFO | Disk Reads - Custom | Disk Writes - Random | Disk Writes - FIFO | Disk Writes - 2FIFO | Disk Writes - Custom |
|----------|---------------------|-------------------|--------------------|---------------------|----------------------|--------------------|---------------------|----------------------|
| 5 | 1384 | 1227 | 1291 | 1350 | 765 | 716 | 716 | 713 |
| 10 | 1048 | 998 | 998 | 960 | 621 | 604 | 604 | 597 |
| 20 | 815 | 780 | 780 | 733 | 521 | 500 | 500 | 486 |
| 30 | 644 | 570 | 650 | 555 | 433 | 400 | 400 | 378 |
| 40 | 550 | 560 | 560 | 514 | 405 | 400 | 400 | 371 |
| 50 | 447 | 450 | 450 | 364 | 347 | 300 | 300 | 263 |
| 60 | 358 | 340 | 420 | 322 | 287 | 300 | 300 | 241 |
| 70 | 278 | 330 | 330 | 292 | 237 | 300 | 300 | 231 |
| 80 | 196 | 320 | 320 | 262 | 173 | 300 | 300 | 221 |
| 90 | 85 | 310 | 310 | 232 | 82 | 300 | 300 | 211 |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



Focus

| # Frames | Disk Reads: Random | Disk Reads: FIFO | Disk Reads: 2FIFO | Disk Reads: Custom | Disk Writes: Random | Disk Writes: FIFO | Disk Writes: 2FIFO | Disk Writes: Custom |
|----------|--------------------|------------------|-------------------|--------------------|---------------------|-------------------|--------------------|---------------------|
| 5 | 292 | 290 | 291 | 287 | 198 | 196 | 197 | 193 |
| 10 | 283 | 278 | 279 | 272 | 194 | 189 | 190 | 182 |
| 20 | 258 | 255 | 257 | 246 | 181 | 181 | 181 | 167 |
| 30 | 228 | 227 | 232 | 212 | 170 | 164 | 169 | 142 |
| 40 | 192 | 207 | 202 | 184 | 149 | 154 | 152 | 125 |
| 50 | 170 | 186 | 185 | 164 | 139 | 153 | 151 | 116 |
| 60 | 133 | 140 | 154 | 122 | 113 | 140 | 138 | 82 |
| 70 | 106 | 130 | 114 | 98 | 94 | 130 | 110 | 68 |
| 80 | 78 | 120 | 100 | 61 | 69 | 120 | 100 | 41 |
| 90 | 29 | 110 | 83 | 32 | 28 | 110 | 83 | 22 |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |



Scan

| # Frames | Disk Reads: Random | Disk Reads: FIFO | Disk Reads: 2FIFO | Disk Reads: Custom | Disk Writes: Random | Disk Writes: FIFO | Disk Writes: 2FIFO | Disk Writes: Custom |
|----------|--------------------|------------------|-------------------|--------------------|---------------------|-------------------|--------------------|---------------------|
| 5 | 1095 | 1095 | 1095 | 1065 | 100 | 100 | 100 | 97 |
| 10 | 1090 | 1090 | 1090 | 1020 | 100 | 100 | 100 | 93 |
| 20 | 1074 | 1080 | 1080 | 940 | 100 | 100 | 100 | 86 |
| 30 | 1026 | 1070 | 1070 | 850 | 100 | 100 | 100 | 78 |
| 40 | 952 | 1060 | 1060 | 770 | 100 | 100 | 100 | 71 |
| 50 | 840 | 1050 | 1050 | 680 | 100 | 100 | 100 | 63 |
| 60 | 719 | 1040 | 1040 | 450 | 100 | 100 | 100 | 41 |
| 70 | 562 | 1030 | 1030 | 340 | 100 | 100 | 100 | 31 |
| 80 | 388 | 1020 | 1020 | 230 | 98 | 100 | 100 | 21 |
| 90 | 202 | 1010 | 1010 | 120 | 91 | 100 | 100 | 11 |
| 100 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

