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COMP 340 Project 3

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**Task 1**

|  |  |  |  |
| --- | --- | --- | --- |
| Process | RSS (KiB) | VSZ (KiB) | % MEM |
| Main, no allocation | 652 | 10220 | 0.0 |
| First child, no allocation | 128 | 10220 | 0.0 |
| Second child, HUGE malloc() loop | 2,029,420 | 698,859,460 | 52.2 |
| Main after second child | 712 | 10232 | 0.0 |
| Third child, no allocation | 92 | 10232 | 0.0 |

**Task 2**

3 forks:

|  |  |  |
| --- | --- | --- |
| Process | RSS (KiB) | VSZ (KiB) |
| Main before children | 636 | 6424 |
| Main after 1 child fork | 732 | 6432 |
| Main after 2 child forks | 736 | 6436 |
| Main after 3 child forks | 740 | 6440 |
| First child | 288 | 6432 |
| Second child | 292 | 6436 |
| Third child | 296 | 6440 |

Execv with big\_function

|  |  |  |  |
| --- | --- | --- | --- |
| Process | RSS (KiB) | VSZ (KiB) | % MEM |
| Main at start | 644 | 6428 | 0.0 |
| Child at start | 288 | 6432 | 0.0 |
| Main after child calls execv | 736 | 6432 | 0.0 |
| Child after execv | 200720 | 97804436 | 5.1 |

Execv with empty\_function

|  |  |  |  |
| --- | --- | --- | --- |
| Process | RSS (KiB) | VSZ (KiB) | % MEM |
| Main at start | 644 | 6428 | 0.0 |
| Child at start | 288 | 6432 | 0.0 |
| Main after child calls execv | 736 | 6432 | 0.0 |
| Child after execv | 344 | 4164 | 0.0 |