When n=3

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | m=2 | m=4 | m=6 | m=8 |
| sec | 0 | 0 | 4 | 88 |
| musec | 15832 | 259803 | 267847 | 25982 |

The major bottleneck in this program was caused by alloc and free function, since when a small memory was requested, it need to take a large amount of time to split from a large memory block to a smaller block. When the large memory block split into too many small blocks, the header it contains would waste a certain amount of memory space. Next time when it request a difference size of memory, the program need to first free up the existing used block and allocated the appropriate memory block to the new request. Thus, this method will only be efficient when the size of request memory is large. That why it limited the input n<=3 and m<=8.