```
  GNU nano 6.2                                                memory.c
#include<stdio.h>
#include<stdlib.h>
#include<time.h>
#include<unistd.h>


int main(int argc, char* argv[]){
    printf("Current Process ID = %d\n",getpid());
    long long int size = ((long long int)atoi(argv[1]))*1024*1024; //in bytes
    int* buffer = (int*)malloc(size);

    //run the while loop for given amount of time.
    time_t endwait, seconds, start;
    seconds=atoi(argv[2]);
    start=time(NULL);
    endwait = start + seconds;

    while(start<endwait){
        printf(".");
        fflush(stdout);
        for(long long int i=0; i<size/sizeof(int); i++){
            buffer[i] = i;
        }
        start = time(NULL);
    }
    printf("(done)\n");
    return 0;
}
```

Before Execution→

```
ankush@ar: ~
Every 1.0s: free -m                                  ar: Sun Nov 13 10:59:29 2022

               total        used        free      shared  buff/cache   available
Mem:           10931         774        9287          50         869        9865
Swap:           2047           0        2047
```

After Execution→

```
ankush@ar:~/Desktop$ nano memory.c
ankush@ar:~/Desktop$ ./a.out 1000 20
Current Process ID = 3550
.....................(done)
ankush@ar:~/Desktop$ ./memory. 1000 20
```

```
ankush@ar: ~
Every 1.0s: free -m                                  ar: Sun Nov 13 11:02:41 2022

               total        used        free      shared  buff/cache   available
Mem:           10931         737        9324          50         869        9903
Swap:           2047           0        2047
```