Experiment 6:- Write a C program that takes, as a command line argument, the number of megabytes of memory it will use and during execution it should consume that much memory. Observe memory usage during program execution using free command.

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Syntax:
       #include<stdio.h>
       #include<stlib.h>
       #include<time.h>
       #include<unistd.h>
       int main(int argc, char* argv[])
       {
        printf("Current Process ID =%d\n",getpid());
       long int size= ((long int)atoi(argv[1]))*1024*1024;
       int* buffer = (int*)malloc(size);
       time_t endwait, seconds, start;
       seconds=atoi(argv[2]);
       start= time(NULL);
       endwait= start+seconds:
       while(start<endwait){</pre>
             printf(".");
             fflush(stdout);
              for(long int i=0; i<size/sizeof(int); i++)
                           buffer[i] = i;
              Start= time(NULL);
       printf("(done)\n");
       return 0;
       }
```

E.g.:  $Ex_{6}$ ,  $Ex_{6a}$ ,  $Ex_{6b}$ .