

Source

```
#include <time.h>
#include <stdio.h>
#include <stdlib.h>

FILE* file;

#define __printf(...) fprintf(file, __VA_ARGS__)
#define __test(n) time = loop(n); __printf("Loop: %d, elapsed: %d, e: %d\n", n,
time, time / n);

clock_t loop(int a) {
    clock_t start = clock(), end;

    for(int i = 0; i < a; i++) {
        system("ls -l /");
    }

    end = clock();

    return end - start;
}

int main() {
    file = fopen("Test.txt", "w");
    clock_t start, end;

    int time;

    __test(1);
    __test(100);
    __test(1000);
    __test(10000);
    __test(100000);

    fclose(file);
    return 0;
}
```

Test.txt after running

```
Loop: 1, elapsed: 108, e: 108
Loop: 100, elapsed: 8202, e: 82
Loop: 1000, elapsed: 81237, e: 81
Loop: 10000, elapsed: 797114, e: 79
Loop: 100000, elapsed: 8107779, e: 81
```

Each Execution

```

total 2272
lrwxrwxrwx    1 root root      7 Nov 23  2023 bin -> usr/bin
drwxr-xr-x    2 root root  4096 Apr 18  2022 boot
drwxr-xr-x   16 root root  3600 Oct 15 00:26 dev
drwxr-xr-x   85 root root  4096 Oct 15 14:14 etc
drwxr-xr-x    3 root root  4096 Sep 10 16:13 home
-rwxrwxrwx    1 root root 2260248 Sep 27 09:55 init
lrwxrwxrwx    1 root root      7 Nov 23  2023 lib -> usr/lib
lrwxrwxrwx    1 root root      9 Nov 23  2023 lib32 -> usr/lib32
lrwxrwxrwx    1 root root      9 Nov 23  2023 lib64 -> usr/lib64
lrwxrwxrwx    1 root root     10 Nov 23  2023 libx32 -> usr/libx32
drwx-----   2 root root 16384 Sep 10 16:13 lost+found
drwxr-xr-x    2 root root  4096 Nov 23  2023 media
drwxr-xr-x    5 root root  4096 Sep 10 16:13 mnt
drwxr-xr-x    3 root root  4096 Sep 10 17:17 opt
dr-xr-xr-x  283 root root      0 Oct 15 00:25 proc
drwx-----   4 root root  4096 Sep 10 16:13 root
drwxr-xr-x   20 root root   620 Oct 15 14:13 run
lrwxrwxrwx    1 root root      8 Nov 23  2023 sbin -> usr/sbin
drwxr-xr-x   10 root root  4096 Sep 10 18:43 snap
drwxr-xr-x    2 root root  4096 Nov 23  2023 srv
dr-xr-xr-x   11 root root      0 Oct 15 00:25 sys
drwxrwxrwt   10 root root  4096 Oct 15 14:17 tmp
drwxr-xr-x   14 root root  4096 Nov 23  2023 usr
drwxr-xr-x   13 root root  4096 Nov 23  2023 var

```