

22bps1059

one

```
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <unistd.h>
4 #include <sys/types.h>
5
6 pid_t fork();
7 int main() {
8     pid_t child = fork();
9
10    if(child == 0 ) { // child
11        execlp("./lock.sh","./lock.sh",NULL);
12        exit(0);
13    }
14    else if(child > 0) { // parent
15        execlp("./lock.sh","./lock.sh",NULL);
16        exit(0);
17    }
18    else {
19        perror("fork error");
20        exit(0);
21    }
22    wait(NULL);
23    return 0;
24 }
```

```
1 #!/bin/bash
2 flock data.txt -c ./do
3
4
5
6
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```

```
2 #include <stdio.h>
3 #include <string.h>
4
5 int main() {
6     FILE* fptr;
7     fptr = fopen("data.txt", "r");
8     char buf[13];
9     char* data = fgets(buf,13,fptr);
10    strcat(data,"4\n");
11    fclose(fptr);
12
13    printf("file is being modified by %d\n", getpid());
14    sleep(3);
15
16    fptr = fopen("data.txt", "w");
17    fprintf(fptr,"%s",data);
18    fclose(fptr);
19 }
```

do.c 12,0-1 33%

cardi~/vit/os/lab11 [2/575]
cardi~/vit/os/lab11 ./one
file is being modified by 354158
file is being modified by 354163
cardi~/vit/os/lab11 cat
data.txt do do.c lock.sh one one.c
sample/
cardi~/vit/os/lab11 cat data.txt
422424
4
cardi~/vit/os/lab11

one.c 22,15 All lock.sh 1,1 All

[0] 0:nvim*H "moon" 11:03 02-Nov-23