



PRACTICA 9

⌚ Created	@January 15, 2021 10:31 AM
📅 Date	@December 14, 2020 → December 27, 2020
☰ Tags	
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Tema i què es fa

Sistema de ficheros. Modificar el puntero de lectura y escritura mediante la llamada `lseek`. Entender hard y soft links.

Sessions i Codi

▼ append.c

```
#include <sys/types.h>
#include <sys/stat.h>
#include <fcntl.h>
#include <string.h>
#include <unistd.h>
#include <stdlib.h>
#include <stdio.h>

void halt(char c[]) {
```

```

    perror(c);
    exit(0);
}

void Usage(void) {
    char buff[] = "Usage: ./append [arg0]";
    write(1, buff, strlen(buff));
}

int main(int argc, char **argv) {
    if (argc < 2) Usage();
    else {
        int fd, ini, fi;
        char buff[128];
        if ((fd = open(argv[1], O_RDWR)) < 0) halt("open");

        ini = 0;
        if ((fi = lseek(fd, 0, SEEK_END)) < 0) halt("lseek");
        //sprintf(buff, "%d\n", fi);
        //write(1, buff, strlen(buff));
        char c;
        lseek(fd, ini, SEEK_SET);
        while ((read(fd, &c, sizeof(char)) > 0)
            && ini < fi) {
            lseek(fd, 0, SEEK_END);
            write(fd, &c, sizeof(char));
            ++ini;
            lseek(fd, ini, SEEK_SET);
        }
    }
}

```

▼ insertarx2.c

```

#include <sys/types.h>
#include <sys/stat.h>
#include <fcntl.h>
#include <string.h>
#include <unistd.h>
#include <stdlib.h>
#include <stdio.h>

void halt(char c[]) {
    perror(c);
    exit(0);
}

void Usage(void) {
    char buff[] = "Usage: ./append [arg0]";
    write(1, buff, strlen(buff));
}

int main(int argc, char **argv) {
    if (argc < 2) Usage();
    else {

```

```

int pos = atoi(argv[2]);
char c;
int fd1, ini;
char buff[128];
if ((fd1 = open(argv[1], O_RDWR)) < 0) halt("open");
if (lseek(fd1, 0, SEEK_END) < 0) halt("lseek");

//sprintf(buff, "%d\n", fi);
//write(1, buff, strlen(buff));

lseek(fd1, -1, SEEK_END);
ini = -2;
while (read(fd1, &c, sizeof(char) > 0)) {
    write(fd1, &c, sizeof(char));
    if (lseek(fd1, ini, SEEK_END) < 0) return;
    --ini;
    if (lseek(fd1, 0, SEEK_CUR) == pos) {
        write(fd1, 'X', sizeof(char));
        return;
    }
}
}
}

```

▼ invirtiendo_fichero.c

```

#include <sys/types.h>
#include <sys/stat.h>
#include <fcntl.h>
#include <string.h>
#include <unistd.h>
#include <stdlib.h>
#include <stdio.h>

void halt(char c[]) {
    perror(c);
    exit(0);
}

void Usage(void) {
    char buff[] = "Usage: ./append [arg0]";
    write(1, buff, strlen(buff));
}

int main(int argc, char **argv) {
    if (argc < 2) Usage();
    else {
        int fd1, fd2, ini;
        char buff[128];
        if ((fd1 = open(argv[1], O_RDONLY)) < 0) halt("open");
        if (lseek(fd1, 0, SEEK_END) < 0) halt("lseek");

        if ((fd2 = creat("out", 0600)) < 0) halt("creat");

        //sprintf(buff, "%d\n", fi);

```

```
//write(1, buff, strlen(buff));
char c;
lseek(fd1, -1, SEEK_END);
ini = -2;
while (read(fd1, &c, sizeof(char) > 0)) {
    write(fd2, &c, sizeof(char));
    if (lseek(fd1, ini, SEEK_END) < 0) return;
    --ini;
}
}
```

Manual



df - Devuelve info sobre el sistema de ficheros



ln - Crea enlaces a ficheros



namei - Procesa la ruta de un fichero



lseek - Modifica la posicion de lectura escritura de un fichero