

```
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <math.h>
4
5 /* PROTOTIPOS */
6 void simplificaFraccion(long *, long *);
7 long mcd(long, long);
8
9 /* FUNCION PRINCIPAL */
10 int main(void) {
11     long num, den, max;
12
13     puts("=====");
14     puts("      SIMPLIFICAR FRACCION      ");
15     puts("=====\\n");
16
17     printf("Introduce el numerador: ");
18     scanf("%ld", &num);
19     printf("Introduce el denominador: ");
20     scanf("%ld", &den);
21
22     printf("Fraccion introducida: %ld/%ld\\n", num, den);
23     simplificaFraccion(&num, &den);
24     printf("Fraccion simplificada: %ld/%ld\\n", num, den);
25
26     puts("");
27     system("pause");
28     return 0;
29 }
30
31 void simplificaFraccion(long *num, long *den) {
32     long max;
33     int sign = 0;
34
35     if((*num * *den) < 0 ) sign = 1;
36
37     max = mcd(labs(*num), labs(*den));
38
39     *num = labs(*num) / max;
40     *den = labs(*den) / max;
41
42     if(sign) *num = -(*num);
43 }
44
45 long mcd(long a, long b) {
46     long c;
47
48     if(b > a) {
49         long temp = a;
50         a = b;
51         b = temp;
52     }
53
54     do {
55         c = a % b;
56         if(c != 0) {
57             a = b;
58             b = c;
59         }
60     } while(c != 0);
```

```
61  
62     return b;  
63 }
```