



Laboratório 05

Recursividade

```
1 #include <stdio.h>
2 #include <stdlib.h>
3 #include <string.h>
4 #include <ctype.h>
5
6 int fat (int n){
7     printf("\t\tEntrou fat(%d)\n", n);
8     int resp;
9     if(n==1)
10         resp = 1;
11     else
12         resp = n * fat(n-1);
13     printf("\t\tSaiu fat(%d) = %d\n", n, resp);
14     return resp;
15 }
16
17 int somatorio (int n){
18     int resp;
19     if(n==1){ //condição de parada
20         resp = 1;
21     } else{
22         resp = n + somatorio(n-1);
23     }
24     return resp;
25 }
26
27 int multi (int num, int vezes, int i){
28     printf("multi(%d, %d)\n", num, i);
29     int resp = 0;
30     if(i < vezes){
31         resp = num + multi(num, vezes, i+1);
32     }
33     printf("resp(%d)\n", resp);
34     return resp;
35 }
36
37 int main(void){
38     int num1, num2;
39     printf("Entre com dois numeros: \n");
40     scanf("%d %d", &num1, &num2);
41
42     printf("\t\t%d\n", multi(num1, num2, 0));
43     return 0;
44 }
45
46
```