

```

1  #include <stdio.h>
2  #include <stdlib.h>
3  #include <locale.h>
4
5  int main(){
6  setlocale(LC_ALL,"Portuguese");
7  int num,dg4,dg3,dg2,dg1,a,b,c,inv,somainv,dig;
8
9  printf("DIGITE UM NÚMERO DE 3 DÍGITOS: ");
10 scanf("%i",&num); //num = 123
11 dg3 = num%10; //3
12 a = num/10; //12
13 dg2 = a%10; //2
14 b = a/10; // 1,2
15 dg1 = b; // 1
16 inv= (dg3*100) + (dg2*10) + (dg1*1);
17 somainv = inv + num;
18
19 if(somainv>999){
20                                     //somainv = 1234
21 dg4 = somainv%10; //4
22 a = somainv/10; //123
23 dg3 = a%10; //3
24 b = a/10; // 12
25 dg2 = b%10; // 2
26 c = b/10; //1,2
27 dg1 = c; // 1
28 inv= (dg1*1) + (dg2*2) + (dg3*3) + (dg4*4);
29 dig = inv%10;
30 printf("O DÍGITO VERIFICADOR É: %i",dig);
31
32 }else{                                     //somainv = 123
33 dg3 = somainv%10; //3
34 a = somainv/10; //12
35 dg2 = a%10; //2
36 b = a/10; // 1,2
37 dg1 = b; // 1
38 inv= (dg1*1) + (dg2*2) + (dg3*3);
39 dig = inv%10;
40 printf("O DÍGITO VERIFICADOR É: %i\n\n",dig);
41 system("PAUSE");
42 }
43 return 0;
44
45 }

```