

**Universidad Nacional Autónoma de  
México**

**Facultad de Ingeniería**

**Estructura de Datos y Algoritmos I**

**Actividad 3 Miércoles: Sudoku**

**Salazar Barrera Diego**

**15/03/2021**

```

1 //programa elaborado por Diego Salazar Barrera
2 #include<stdio.h>
3 #include<stdlib.h>
4 #define p printf
5 #define s scanf
6 int main(){
7     int a[9][9],f,c,cont=1,numero;
8     while (cont<=3){
9         system("cls");
10        p(" | 0 8 0 | 0 0 0 | 2 0 0 |\n");
11        p(" | 0 0 0 | 0 8 4 | 0 9 0 |\n");
12        p(" | 0 0 6 | 3 2 0 | 0 1 0 |\n");
13        p(" |-----|-----|-----|\n");
14        p(" | 0 9 7 | 0 0 0 | 0 8 0 |\n");
15        p(" | 8 0 0 | 9 0 3 | 0 0 2 |\n");
16        p(" | 0 1 0 | 0 0 0 | 9 5 0 |\n");
17        p(" |-----|-----|-----|\n");
18        p(" | 0 7 0 | 0 4 5 | 8 0 0 |\n");
19        p(" | 0 3 0 | 7 1 0 | 0 0 0 |\n");
20        p(" | 0 0 8 | 0 0 0 | 0 4 0 |\n");
21        p("Ingresar el numero de fila: ");
22        s("%d",&f);
23        p("Ingresar el numero de columna: ");
24        s("%d",&c);
25        p("Ingrese el digito: ");
26        s("%d",&numero);
27        a[f][c]=numero;
28        cont++;
29    }
30    p(" |%d %d %d | %d %d %d | 2 %d %d|\n", a[1][1],a[1][3],a[1][4],a[1][5],a[1][6],a[1][8],a[1][9]);
31    p(" |%d %d %d | %d 8 4 | %d 9 %d|\n", a[2][1],a[2][2],a[2][3],a[2][4],a[2][7],a[2][9]);
32    p(" |%d %d 6 | 3 2 %d | %d 1 %d|\n", a[3][1],a[3][2],a[3][6],a[3][7],a[3][9]);
33    p(" |-----|-----|-----|\n");
34    p(" |%d 9 7 | %d %d %d | %d 8 %d|\n", a[4][1],a[4][4],a[4][5],a[4][6],a[4][7],a[4][9]);
35    p(" | 8 %d %d | 9 %d 3 | %d %d 2|\n", a[5][2],a[5][3],a[5][5],a[5][7],a[5][8]);
36    p(" |%d 1 %d | %d %d %d | 9 5 %d|\n", a[6][1],a[6][3],a[6][4],a[6][5],a[6][6],a[6][9]);
37    p(" |-----|-----|-----|\n");
38    p(" |%d 7 %d | %d 4 5 | 8 %d %d|\n",a[7][1],a[7][3],a[7][4],a[7][8],a[7][9]);
39    p(" |%d 3 %d | 7 1 %d | %d %d %d|\n",a[8][1],a[8][3],a[8][6],a[8][7],a[8][8],a[8][9]);
40    p(" |%d %d 8 | %d %d %d | %d 4 %d|\n",a[9][1],a[9][2],a[9][4],a[9][5],a[9][6],a[9][7],a[9][9]);
41    return(0);
42 }

```

```

D:\Documentos\Facultad\2021-2\EDA\sudoku.exe
| 0 8 0 | 0 0 0 | 2 0 0 |
| 0 0 0 | 0 8 4 | 0 9 0 |
| 0 0 6 | 3 2 0 | 0 1 0 |
|-----|-----|-----|
| 0 9 7 | 0 0 0 | 0 8 0 |
| 8 0 0 | 9 0 3 | 0 0 2 |
| 0 1 0 | 0 0 0 | 9 5 0 |
|-----|-----|-----|
| 0 7 0 | 0 4 5 | 8 0 0 |
| 0 3 0 | 7 1 0 | 0 0 0 |
| 0 0 8 | 0 0 0 | 0 4 0 |
Ingresar el numero de fila: 1
Ingresar el numero de columna: 1
Ingrese el digito: 7
| 7 8 4 | 1 9 6 | 2 3 5 |
| 3 2 1 | 5 8 4 | 6 9 7 |
| 9 5 6 | 3 2 7 | 4 1 8 |
|-----|-----|-----|
| 2 9 7 | 4 5 1 | 3 8 6 |
| 8 4 5 | 9 6 3 | 1 7 2 |
| 6 1 3 | 8 7 2 | 9 5 4 |
|-----|-----|-----|
| 1 7 9 | 6 4 5 | 8 2 3 |
| 4 3 2 | 7 1 8 | 5 6 9 |
| 5 5 4 8 | 2 3 9 | 7 4 1 |
-----
Process exited after 333.7 seconds with return value 3221225477
Presione una tecla para continuar . . .

```