Universidad Nacional Autónoma de México Facultad de Ingeniería



Asignatura: Estructura de Datos y Algoritmos I

Actividad 3: Sudoku.

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Código del Sudoku

Adjuntar capturas del código y del ejecutable.

```
Start here
         × Sudoku.c ×
    1
          #include <stdio.h>
        3
              printf("\n\t\tSUDOKU\n\n");
    5
              int Sudoku[9][9]={3,0,0,0,0,0,5,4,0,
    6
                                4,8,6,1,3,0,0,0,0,
                                0,0,0,0,7,6,0,3,1,
    8
                                0,3,2,0,0,8,0,0,4,
    9
                                0,6,0,0,0,0,0,2,0,
   10
                                0,1,0,7,2,3,0,0,0,
   11
                                9,4,3,0,0,0,2,1,0,
   12
                                6,0,7,0,0,0,0,8,0,
   13
                                0,0,0,0,4,2,7,6,9};
   14
             int i,j;
   15
              for(i=0;i<9;i++){
   16
                  for(j=0;j<9;j++){
   17
                      printf("[%d] ",Sudoku[i][j]);
   18
   19
                  printf("\n\n");
   20
   21
              printf("Complete los espacios con 0 del sudoku\n\n");
```

```
Start here
         × Sudoku.c ×
   22
   23
              printf("posicion [1,2] :"); scanf("%d",&x); Sudoku[0][1]=x;
   24
   25
              printf("posicion [1,3] :"); scanf("%d",&x); Sudoku[0][2]=x;
              printf("posicion [1,4] :"); scanf("%d",&x); Sudoku[0][3]=x;
   26
   27
              printf("posicion [1,5] :"); scanf("%d",&x); Sudoku[0][4]=x;
   28
              printf("posicion [1,6] :"); scanf("%d",&x); Sudoku[0][5]=x;
   29
              printf("posicion [1,9] :"); scanf("%d",&x); Sudoku[0][8]=x;
              printf("\n");
   30
   31
              printf("posicion [2,6] :"); scanf("%d",&x); Sudoku[1][5]=x;
   32
              printf("posicion [2,7] :"); scanf("%d",&x); Sudoku[1][6]=x;
              printf("posicion [2,8] :"); scanf("%d", &x); Sudoku[1][7]=x;
   33
   34
              printf("posicion [2,9] :"); scanf("%d",&x); Sudoku[1][8]=x;
   35
              printf("\n");
   36
              printf("posicion [3,1] :"); scanf("%d",&x); Sudoku[2][0]=x;
              printf("posicion [3,2] :"); scanf("%d", &x); Sudoku[2][1]=x;
   37
   38
              printf("posicion [3,3] :"); scanf("%d",&x); Sudoku[2][2]=x;
              printf("posicion [3,4]:"); scanf("%d",&x); Sudoku[2][3]=x;
   39
              printf("posicion [3,7] :"); scanf("%d",&x); Sudoku[2][6]=x;
   40
   41
              printf("\n");
   42
```

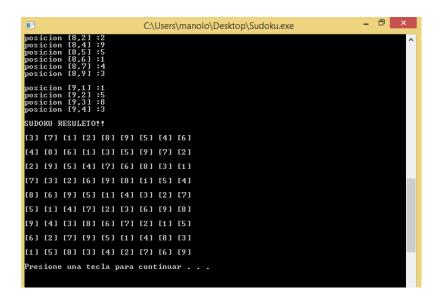
```
Start here
         × Sudoku.c ×
   43
              for(i=0;i<9;i++){
                  for(j=0;j<9;j++){
   44
                      printf("[%d] ",Sudoku[i][j]);
   45
   46
   47
                  printf("\n\n");
   48
              printf("\n");
   49
   50
   51
              printf("posicion [4,1] :"); scanf("%d",&x); Sudoku[3][0]=x;
   52
              printf("posicion [4,4] :"); scanf("%d",&x); Sudoku[3][3]=x;
              printf("posicion [4,5] :"); scanf("%d", &x); Sudoku[3][4]=x;
   54
              printf("posicion [4,7] :"); scanf("%d", &x); Sudoku[3][6]=x;
              printf("posicion [4,8] :"); scanf("%d",&x); Sudoku[3][7]=x;
   55
   56
              printf("\n"):
   57
              printf("posicion [5,1] :"); scanf("%d",&x); Sudoku[4][0]=x;
   58
              printf("posicion [5,3] :"); scanf("%d",&x); Sudoku[4][2]=x;
              printf("mosicion [5,4] :"); scanf("%d",&x); Sudoku[4][3]=x;
   59
   60
              printf("posicion [5,5] :"); scanf("%d", &x); Sudoku[4][4]=x;
              printf("posicion [5,6] :"); scanf("%d",&x); Sudoku[4][5]=x;
   61
   62
              printf("posicion [5,7] :"); scanf("%d",&x); Sudoku[4][6]=x;
              printf("posicion [5,9]:"); scanf("%d",&x); Sudoku[4][8]=x;
   63
```

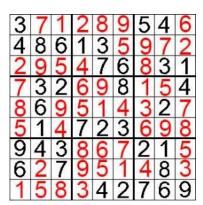
```
× Sudoku.c ×
Start here
   64
              printf("\n");
   65
              printf("posicion [6,1] :"); scanf("%d",&x); Sudoku[5][0]=x;
              printf("posicion [6,3] :"); scanf("%d",&x); Sudoku[5][2]=x;
   66
              printf("posicion [6,7] :"); scanf("%d", &x); Sudoku[5][6]=x;
   67
              printf("posicion [6,8]:"); scanf("%d",&x); Sudoku[5][7]=x;
   68
              printf("posicion [6,9] :"); scanf("%d",&x); Sudoku[5][8]=x;
   69
              printf("\n");
   70
   71
   72
              for(i=0;i<9;i++){
   73
                  for(j=0;j<9;j++){
                     printf("[%d] ", Sudoku[i][j]);
   74
   75
   76
                  printf("\n\n");
   77
   78
              printf("\n");
   79
              printf("posicion [7,4] :"); scanf("%d",&x); Sudoku[6][3]=x;
   80
              printf("posicion [7,5] :"); scanf("%d", &x); Sudoku[6][4]=x;
   81
              printf("posicion [7,6] :"); scanf("%d",&x); Sudoku[6][5]=x;
   82
              printf("posicion [7,9] :"); scanf("%d", &x); Sudoku[6][8]=x;
   83
              printf("\n");
   84
```

```
printf("posicion [8,2] :"); scanf("%d",&x); Sudoku[7][1]=x;
85
86
            printf("posicion [8,4] :"); scanf("%d",&x); Sudoku[7][3]=x;
 87
            printf("posicion [8,5] :"); scanf("%d",&x); Sudoku[7][4]=x;
 88
            printf("posicion [8,6] :"); scanf("%d",&x); Sudoku[7][5]=x;
            printf("posicion [8,7]:"); scanf("%d",&x); Sudoku[7][6]=x;
89
90
            printf("posicion [8,9] :"); scanf("%d",&x); Sudoku[7][8]=x;
 91
            printf("\n");
 92
            printf("posicion [9,1]:"); scanf("%d",&x); Sudoku[8][0]=x;
            printf("posicion [9,2] :"); scanf("%d",&x); Sudoku[8][1]=x;
93
            printf("posicion [9,3] :"); scanf("%d",&x); Sudoku[8][2]=x;
94
 95
            printf("posicion [9,4] :"); scanf("%d", &x); Sudoku[8][3]=x;
 96
            printf("\n");
97
            printf("SUDOKU RESULETO!!\n\n");
98
99
100
            for(i=0;i<9;i++){
101
                for(i=0:i<9:i++){
102
                    printf("[%d] ",Sudoku[i][j]);
103
104
                printf("\n\n");
105
```

```
106 | system("pause");
107 | return 0;
108 |
```

```
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                        C:\Users\manolo\Desktop\Sudoku.exe
[3] [0] [0] [0] [0] [0] [5] [4] [0]
[4] [8] [6] [1] [3] [0] [0] [0] [0]
[0] [0] [0] [0] [7] [6] [0] [3] [1]
[0] [3] [2] [0] [0] [8] [0] [0] [4]
[0] [6] [0] [0] [0] [0] [0] [2] [0]
[0] [1] [0] [7] [2] [3] [0] [0] [0]
[9] [4] [3] [0] [0] [0] [2] [1] [0]
[6] [0] [7] [0] [0] [0] [0] [8] [8]
[0] [0] [0] [0] [4] [2] [7] [6] [9]
 omplete los espacios con 0 del sudoku
[3] [7] [1] [2] [8] [9] [5] [4] [6]
[4] [8] [6] [1] [3] [5] [9] [7] [2]
[2] [9] [5] [4] [7] [6] [8] [3] [1]
[0] [3] [2] [0] [0] [8] [0] [0] [4]
[0] [6] [0] [0] [0] [0] [0] [2] [0]
[0] [1] [0] [7] [2] [3] [0] [0] [0]
[9] [4] [3] [0] [0] [0] [2] [1] [0]
[6] [0] [7] [0] [0] [0] [0] [8] [8]
```





Bibliografía:

https://quehacerenbenidorm.com/wp-content/uploads/2019/03/Sudoku-nivel-2-RESUELTO.jpg