



**Universidad Nacional Autónoma de  
México**



**Facultad de Ingeniería**

**Semestre 2021-1**

**Estructura de Datos y Algoritmos**

**Actividad :Sudoku**

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# Sudoku

```
#include <stdio.h>

int main() {
    printf("\n\t\tSUDOKU\n\n");
    int Sudoku[9][9] = {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,
                        6,0,7,0,0,0,0,8,0,
                        0,0,0,0,4,2,7,6,9};

    int i, j;
    for(i=0; i<9; i++) {
        for(j=0; j<9; j++) {
            printf("[%d] ", Sudoku[i][j]);
        }
        printf("\n\n");
    }
    printf("Complete los espacios con 0 del sudoku\n\n");

    int x;

    printf("posicion [1,2] :"); scanf("%d", &x); Sudoku[0][1]=x;
    printf("posicion [1,3] :"); scanf("%d", &x); Sudoku[0][2]=x;
    printf("posicion [1,4] :"); scanf("%d", &x); Sudoku[0][3]=x;
    printf("posicion [1,5] :"); scanf("%d", &x); Sudoku[0][4]=x;
    printf("posicion [1,6] :"); scanf("%d", &x); Sudoku[0][5]=x;
    printf("posicion [1,9] :"); scanf("%d", &x); Sudoku[0][8]=x;
    printf("\n");
    printf("posicion [2,6] :"); scanf("%d", &x); Sudoku[1][5]=x;
    printf("posicion [2,7] :"); scanf("%d", &x); Sudoku[1][6]=x;
    printf("posicion [2,8] :"); scanf("%d", &x); Sudoku[1][7]=x;
    printf("posicion [2,9] :"); scanf("%d", &x); Sudoku[1][8]=x;
    printf("\n");
    printf("posicion [3,1] :"); scanf("%d", &x); Sudoku[2][0]=x;
```

```
printf("posicion [3,1] :"); scanf("%d", &x); Sudoku[2][0]=x;
printf("posicion [3,2] :"); scanf("%d", &x); Sudoku[2][1]=x;
printf("posicion [3,3] :"); scanf("%d", &x); Sudoku[2][2]=x;
printf("posicion [3,4] :"); scanf("%d", &x); Sudoku[2][3]=x;
printf("posicion [3,7] :"); scanf("%d", &x); Sudoku[2][6]=x;
printf("\n");
```

```
printf("posicion [4,1] :"); scanf("%d", &x); Sudoku[3][0]=x;
printf("posicion [4,4] :"); scanf("%d", &x); Sudoku[3][3]=x;
printf("posicion [4,5] :"); scanf("%d", &x); Sudoku[3][4]=x;
printf("posicion [4,7] :"); scanf("%d", &x); Sudoku[3][6]=x;
printf("posicion [4,8] :"); scanf("%d", &x); Sudoku[3][7]=x;
printf("\n");
printf("posicion [5,1] :"); scanf("%d", &x); Sudoku[4][0]=x;
printf("posicion [5,3] :"); scanf("%d", &x); Sudoku[4][2]=x;
printf("posicion [5,4] :"); scanf("%d", &x); Sudoku[4][3]=x;
printf("posicion [5,5] :"); scanf("%d", &x); Sudoku[4][4]=x;
printf("posicion [5,6] :"); scanf("%d", &x); Sudoku[4][5]=x;
printf("posicion [5,7] :"); scanf("%d", &x); Sudoku[4][6]=x;
printf("posicion [5,9] :"); scanf("%d", &x); Sudoku[4][8]=x;
printf("\n");
printf("posicion [6,1] :"); scanf("%d", &x); Sudoku[5][0]=x;
printf("posicion [6,3] :"); scanf("%d", &x); Sudoku[5][2]=x;
printf("posicion [6,7] :"); scanf("%d", &x); Sudoku[5][6]=x;
printf("posicion [6,8] :"); scanf("%d", &x); Sudoku[5][7]=x;
printf("posicion [6,9] :"); scanf("%d", &x); Sudoku[5][8]=x;
printf("\n");
```


position, possession

```
printf("posicion [7,4] :"); scanf("%d", &x); Sudoku[6][3]=x;
printf("posicion [7,5] :"); scanf("%d", &x); Sudoku[6][4]=x;
printf("posicion [7,6] :"); scanf("%d", &x); Sudoku[6][5]=x;
printf("posicion [7,9] :"); scanf("%d", &x); Sudoku[6][8]=x;
printf("\n");
printf("posicion [8,2] :"); scanf("%d", &x); Sudoku[7][1]=x;
```

```
printf("posicion [8,4] :"); scanf("%d", &x); Sudoku[7][3]=x;
printf("posicion [8,5] :"); scanf("%d", &x); Sudoku[7][4]=x;
printf("posicion [8,6] :"); scanf("%d", &x); Sudoku[7][5]=x;
```

```
printf("posicion [9,4] :"); scanf("%d", &x); Sudoku[8][3]=x;
printf("\n");
```

```
for(i=0; i<9; i++) {
    for(j=0; j<9; j++) {
        printf("[%d] ", Sudoku[i][j]);
    }
    printf("\n\n");
}
system("pause");
```

 C:\Users\davod\Desktop\Untitled2.exe

## SUDOKU

```
[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] [0]
[0] [0] [0] [0] [4] [2] [7] [6] [9]
```

Complete los espacios con 0 del sudoku

```
posicion [1,2] :0
posicion [1,3] :0
posicion [1,4] :0
posicion [1,5] :0
posicion [1,6] :0
posicion [1,9] :0
```