



NOMBRE DE LA MATERIA: **PROGRAMACIÓN**

NRC: **42555**

HORARIO: **MARTES Y JUEVES 9 AM – 10:55AM**

ESTUDIANTE: **EFRAIN ROBLES PULIDO**

CODIGO: **221350095**

TEMA: **ESTRUCTURA DE CONTROL "FOR" ANIDADOS**

FECHA: **17 de Octubre de 2021**

Practica 31: Despliega en pantalla todas las tablas de multiplicar

Pseudocódigo

//Efrain Robles Pulido

// Practica 31: Despliega en pantalla todas las tablas de multiplicar

Principal

inicio

entero i, j

desde (i ← 1; i ≤ 10; inc i)

inicio

imprimir ("Tabla de multiplicar del", i)

desde (j ← 1; j ≤ 10; inc j)

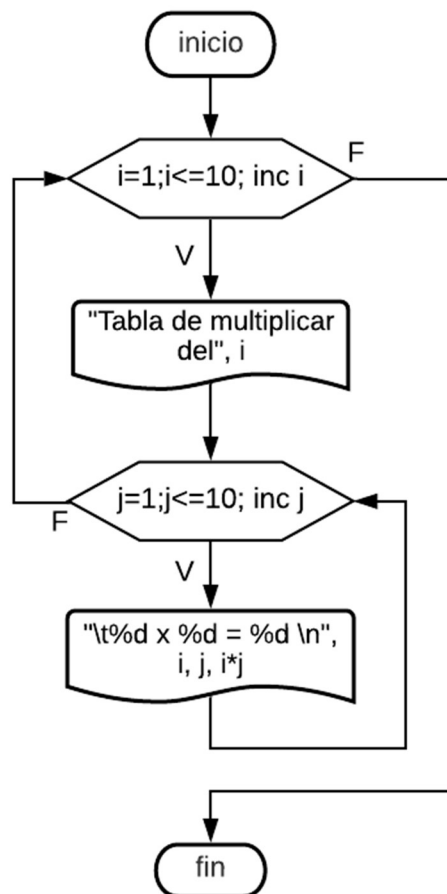
imprimir (i, "x", j, "=", i * j)

fin

regreso 0

fin

Diagrama de flujo



Código en lenguaje C

```
//Efrain Robles Pulido
#include <stdio.h>
#include <stdlib.h>

int main()//Practica 31: Despliega en pantalla todas las tablas de multiplicar
{
    int i,j;

    for(i=1;i<=10;i++){
        printf("\nTabla de multiplicar del %d\n",i);

        for(j=1;j<=10;j++){
            printf("%t%d x %d = %d \n",i,j,i*j);
        }
    }
    return 0;
}
```

```
Tabla de multiplicar del 1
1 x 1 = 1
1 x 2 = 2
1 x 3 = 3
1 x 4 = 4
1 x 5 = 5
1 x 6 = 6
1 x 7 = 7
1 x 8 = 8
1 x 9 = 9
1 x 10 = 10

Tabla de multiplicar del 2
2 x 1 = 2
2 x 2 = 4
2 x 3 = 6
2 x 4 = 8
2 x 5 = 10
2 x 6 = 12
2 x 7 = 14
2 x 8 = 16
2 x 9 = 18
2 x 10 = 20

Tabla de multiplicar del 3
3 x 1 = 3
3 x 2 = 6
3 x 3 = 9
3 x 4 = 12
3 x 5 = 15
3 x 6 = 18
3 x 7 = 21
3 x 8 = 24
3 x 9 = 27
3 x 10 = 30

Tabla de multiplicar del 4
4 x 1 = 4
4 x 2 = 8
4 x 3 = 12
4 x 4 = 16
4 x 5 = 20
4 x 6 = 24
4 x 7 = 28
4 x 8 = 32
4 x 9 = 36
4 x 10 = 40

Tabla de multiplicar del 5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50

Tabla de multiplicar del 6
6 x 1 = 6
6 x 2 = 12
6 x 3 = 18
6 x 4 = 24
6 x 5 = 30
6 x 6 = 36
6 x 7 = 42
6 x 8 = 48
6 x 9 = 54
6 x 10 = 60

Tabla de multiplicar del 7
7 x 1 = 7
7 x 2 = 14
7 x 3 = 21
7 x 4 = 28
7 x 5 = 35
7 x 6 = 42
7 x 7 = 49
7 x 8 = 56
7 x 9 = 63
7 x 10 = 70

Tabla de multiplicar del 8
8 x 1 = 8
8 x 2 = 16
8 x 3 = 24
8 x 4 = 32
8 x 5 = 40
8 x 6 = 48
8 x 7 = 56
8 x 8 = 64
8 x 9 = 72
8 x 10 = 80

Tabla de multiplicar del 9
9 x 1 = 9
9 x 2 = 18
9 x 3 = 27
9 x 4 = 36
9 x 5 = 45
9 x 6 = 54
9 x 7 = 63
9 x 8 = 72
9 x 9 = 81
9 x 10 = 90

Tabla de multiplicar del 10
10 x 1 = 10
10 x 2 = 20
10 x 3 = 30
10 x 4 = 40
10 x 5 = 50
10 x 6 = 60
10 x 7 = 70
10 x 8 = 80
10 x 9 = 90
10 x 10 = 100

Process returned 0 (0x0)   execution time : 0.642 s
Press any key to continue.
```

Practica 32: Tablas de multiplicar del 1 al 10 con while

Pseudocódigo

//Efrain Robles Pulido

Practica 32: Tablas de multiplicar del 1 al 10 con while

Principal

inicio

entero $i \leftarrow 1, j$

mientras ($i \leq 10$)

inicio

imprimir ("Tabla de multiplicar del", i)

$j \leftarrow 1$

mientras ($j \leq 10$)

inicio

imprimir ($i, "x", j, "=", i * j$)

inc j

fin

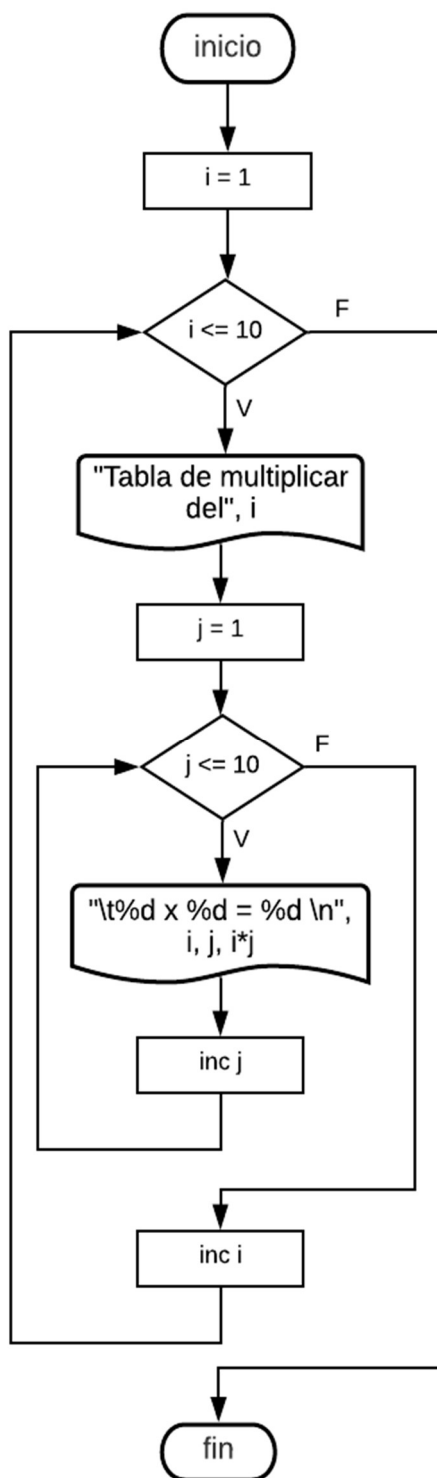
inc i

fin

regreso 0

fin

Diagrama de flujo



Código en lenguaje

```
//Efrain Robles Pulido
#include <stdio.h>
#include <stdlib.h>

int main()//Practica 32: Tablas del 1 al 10 con while
{
    int i=1,j;

    while(i<=10){
        printf("\nTabla de multiplicar del %d\n",i);
        j=1;
        while(j<=10){
            printf("%\t%d x %d = %d \n",i,j,i*j);
            j++;
        }
        i++;
    }
    return 0;
}
```

```
Tabla de multiplicar del 1
1 x 1 = 1
1 x 2 = 2
1 x 3 = 3
1 x 4 = 4
1 x 5 = 5
1 x 6 = 6
1 x 7 = 7
1 x 8 = 8
1 x 9 = 9
1 x 10 = 10

Tabla de multiplicar del 2
2 x 1 = 2
2 x 2 = 4
2 x 3 = 6
2 x 4 = 8
2 x 5 = 10
2 x 6 = 12
2 x 7 = 14
2 x 8 = 16
2 x 9 = 18
2 x 10 = 20

Tabla de multiplicar del 3
3 x 1 = 3
3 x 2 = 6
3 x 3 = 9
3 x 4 = 12
3 x 5 = 15
3 x 6 = 18
3 x 7 = 21
3 x 8 = 24
3 x 9 = 27
3 x 10 = 30

Tabla de multiplicar del 4
4 x 1 = 4
4 x 2 = 8
4 x 3 = 12
4 x 4 = 16
4 x 5 = 20
4 x 6 = 24
4 x 7 = 28
4 x 8 = 32
4 x 9 = 36
4 x 10 = 40

Tabla de multiplicar del 5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50

Tabla de multiplicar del 6
6 x 1 = 6
6 x 2 = 12
6 x 3 = 18
6 x 4 = 24
6 x 5 = 30
6 x 6 = 36
6 x 7 = 42
6 x 8 = 48
6 x 9 = 54
6 x 10 = 60

Tabla de multiplicar del 7
7 x 1 = 7
7 x 2 = 14
7 x 3 = 21
7 x 4 = 28
7 x 5 = 35
7 x 6 = 42
7 x 7 = 49
7 x 8 = 56
7 x 9 = 63
7 x 10 = 70

Tabla de multiplicar del 8
8 x 1 = 8
8 x 2 = 16
8 x 3 = 24
8 x 4 = 32
8 x 5 = 40
8 x 6 = 48
8 x 7 = 56
8 x 8 = 64
8 x 9 = 72
8 x 10 = 80

Tabla de multiplicar del 9
9 x 1 = 9
9 x 2 = 18
9 x 3 = 27
9 x 4 = 36
9 x 5 = 45
9 x 6 = 54
9 x 7 = 63
9 x 8 = 72
9 x 9 = 81
9 x 10 = 90

Tabla de multiplicar del 10
10 x 1 = 10
10 x 2 = 20
10 x 3 = 30
10 x 4 = 40
10 x 5 = 50
10 x 6 = 60
10 x 7 = 70
10 x 8 = 80
10 x 9 = 90
10 x 10 = 100

Process returned 0 (0x0)   execution time : 1.642 s
Press any key to continue.
```

Practica 33: Tablas de multiplicar del 1 al 10 con do-while

Pseudocódigo

Practica 33: Tablas de multiplicar del 1 al 10 con do-while

Principal

inicio

entero $i \leftarrow 1, j$

hacer

inicio

imprimir ("Tabla de multiplicar del", i)

$j \leftarrow 1$

hacer

inicio

imprimir (i , "X", j "=", $i * j$)

inc j

fin

mientras ($j \leq 10$)

inc i

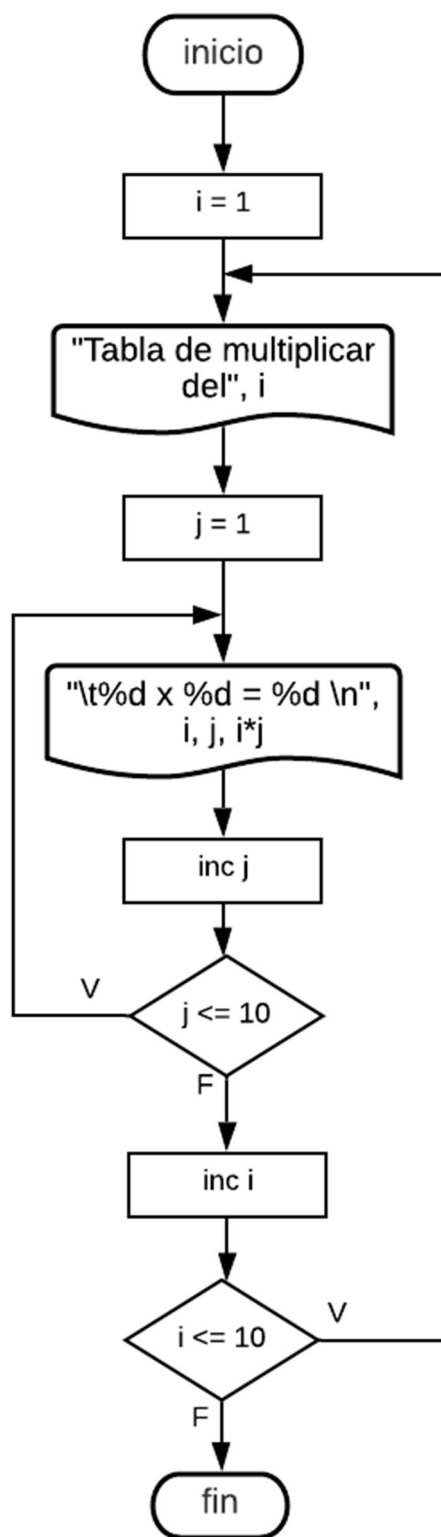
fin

mientras ($i \leq 10$)

regreso 0

fin

Diagrama de flujo



Código en lenguaje C

```
//Efrain Robles Pulido
#include <stdio.h>
#include <stdlib.h>

int main()//Practica 33: Tablas del 1 al 10 con do while
{
    int i=1,j;

    do{
        printf("\nTabla de multiplicar del %d\n",i);
        j=1;
        do{
            printf("%t%d x %d = %d \n",i,j,i*j);
            j++;
        }
        while (j<=10);
        i++;
    }
    while(i<=10);
    return 0;
}
```

```
Tabla de multiplicar del 1
1 x 1 = 1
1 x 2 = 2
1 x 3 = 3
1 x 4 = 4
1 x 5 = 5
1 x 6 = 6
1 x 7 = 7
1 x 8 = 8
1 x 9 = 9
1 x 10 = 10

Tabla de multiplicar del 2
2 x 1 = 2
2 x 2 = 4
2 x 3 = 6
2 x 4 = 8
2 x 5 = 10
2 x 6 = 12
2 x 7 = 14
2 x 8 = 16
2 x 9 = 18
2 x 10 = 20

Tabla de multiplicar del 3
3 x 1 = 3
3 x 2 = 6
3 x 3 = 9
3 x 4 = 12
3 x 5 = 15
3 x 6 = 18
3 x 7 = 21
3 x 8 = 24
3 x 9 = 27
3 x 10 = 30

Tabla de multiplicar del 4
4 x 1 = 4
4 x 2 = 8
4 x 3 = 12
4 x 4 = 16
4 x 5 = 20
4 x 6 = 24
4 x 7 = 28
4 x 8 = 32
4 x 9 = 36
4 x 10 = 40

Tabla de multiplicar del 5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```

```
Tabla de multiplicar del 6
6 x 1 = 6
6 x 2 = 12
6 x 3 = 18
6 x 4 = 24
6 x 5 = 30
6 x 6 = 36
6 x 7 = 42
6 x 8 = 48
6 x 9 = 54
6 x 10 = 60

Tabla de multiplicar del 7
7 x 1 = 7
7 x 2 = 14
7 x 3 = 21
7 x 4 = 28
7 x 5 = 35
7 x 6 = 42
7 x 7 = 49
7 x 8 = 56
7 x 9 = 63
7 x 10 = 70

Tabla de multiplicar del 8
8 x 1 = 8
8 x 2 = 16
8 x 3 = 24
8 x 4 = 32
8 x 5 = 40
8 x 6 = 48
8 x 7 = 56
8 x 8 = 64
8 x 9 = 72
8 x 10 = 80

Tabla de multiplicar del 9
9 x 1 = 9
9 x 2 = 18
9 x 3 = 27
9 x 4 = 36
9 x 5 = 45
9 x 6 = 54
9 x 7 = 63
9 x 8 = 72
9 x 9 = 81
9 x 10 = 90

Tabla de multiplicar del 10
10 x 1 = 10
10 x 2 = 20
10 x 3 = 30
10 x 4 = 40
10 x 5 = 50
10 x 6 = 60
10 x 7 = 70
10 x 8 = 80
10 x 9 = 90
10 x 10 = 100
```

```
Process returned 0 (0x0)   execution time : 0.671 s
Press any key to continue.
```