

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

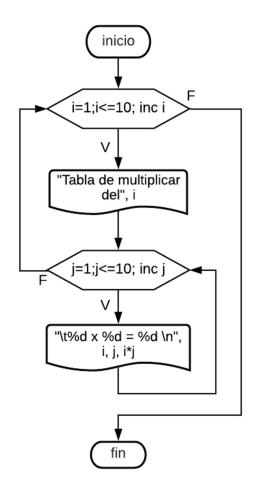
FECHA: 17 de Octubre de 2021

Practica 31: Despliega en pantalla todas las tablas de multiplicar

Pseudocódigo

//Efrain Robles Pulido inicio inicio // Practica 31: Despliega en pantalla todas las tablas de multiplicar del", i) tablas de multiplicar desde (j \leftarrow 1; j <= 10; inc j) regreso 0 desde (i \leftarrow 1; i <= 10; inc i) 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;
}</pre>
```

```
6 x 1 = 6
6 x 2 = 12
6 x 3 = 18
6 x 4 = 24
6 x 5 = 30
                     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
                                                                                                          6 x 6 = 36
6 x 7 = 42
6 x 8 = 48
6 x 9 = 54
6 x 10 = 60
                     1 x 9 = 9
1 x 10 = 10
                                                                                       Tabla de multiplicar del 7
                                                                                                         le multiplica
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
  abla de multiplicar del 2
                     2 x 1 = 2
2 x 2 = 4
2 x 3 = 6
2 x 4 = 8
                     2 x 4 = 8
2 x 5 = 10
2 x 6 = 12
2 x 7 = 14
2 x 8 = 16
                     2 x 10 = 20
                                                                                       Tabla de multiplicar del 8
                                                                                                          e multiplicat
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 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
                                                                                     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
                      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
                                                                                       Tabla de multiplicar del 10
                                                                                                          e multiplicar

10 x 1 = 10

10 x 2 = 20

10 x 3 = 30

10 x 4 = 40

10 x 5 = 50

10 x 7 = 70

10 x 8 = 80

10 x 9 = 90

10 x 9 = 90

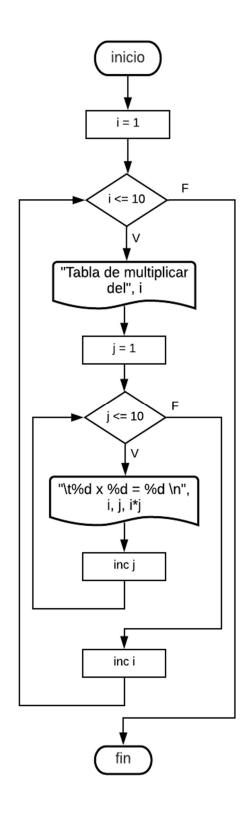
10 x 10 = 16
Tabla de multiplicar del 5
                    5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
                      5 x 5 = 25
                     5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
                                                                                                           10 x 10 = 100
                      5 x 9 = 45
                                                                                           rocess 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

fin

```
//Efrain Robles Pulido
Practica 32: Tablas de multiplicar del 1 al 10 con while
Principal
inicio
    entero i ← 1, j
    mientras (i<=10)
    inicio
         imprimir ("Tabla de multiplicar del", i)
         j ← 1
         mientras (j<=10)
         inicio
              imprimir (i, "x", j "=", i * j)
              inc j
         fin
         inc i
     fin
     regreso 0
```



Código en lenguaje

```
//Efrain Robles Pulido
#include <stdio.h>
#include <stdib.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;
}</pre>
```

```
Tabla de multiplicar del 6
                                                                                                                               de multiplica

6 x 1 = 6

6 x 2 = 12

6 x 3 = 18

6 x 4 = 24

6 x 5 = 36

6 x 6 = 36

6 x 7 = 42

6 x 8 = 48

6 x 9 = 54

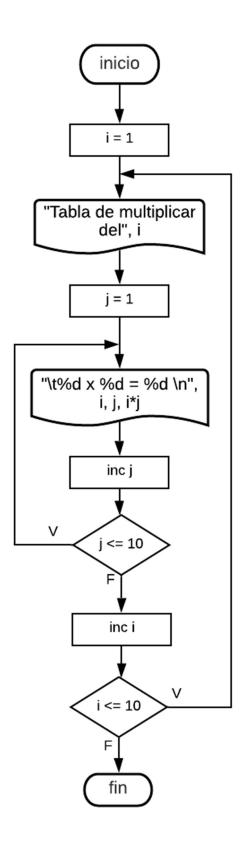
6 x 10 = 60
                        e multiplicar
1 x 1 = 1
1 x 2 = 2
1 x 3 = 3
1 x 4 = 4
1 x 5 = 5
1 x 6 = 6
1 x 7 = 7
1 x 8 = 8
1 x 9 = 9
1 x 10 = 10
                                                                                                     Tabla de multiplicar del 7
7 x 1 = 7
7 x 2 = 14
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 2
                       e multiplicar
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 8
                                                                                                                               de multiplica
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
                      e multiplicar
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 3
                                                                                                          Tabla de multiplicar del 9
 abla de multiplicar del 4
                        e multiplicar
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 10
                                                                                                                                 e multiplicar
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
Fabla 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
                                                                                                                                   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 ← 1, j
    hacer
      inicio
          imprimir ("Tabla de multiplicar del", i)
          j ← 1
          hacer
            inicio
                  imprimir (i, "x", j "=", i * j)
                  inc j
            fin
          mientras (j<=10)
          inc i
      fin
    mientras (i<=10)
    regreso 0
 fin
```

Diagrama de flujo



Código en lenguaje C

```
//Efrain Robles Pulido
#include <stdio.h>
#include <stdib.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;
}</pre>
```

```
Tabla de multiplicar del 6
                                                                                                                                         e multiplica
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
                        1 x 1 = 1
1 x 2 = 2
1 x 3 = 3
1 x 4 = 4
1 x 5 = 5
                         1 x 7 = 7
1 x 8 = 8
                                                                                                                                           6 \times 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 2
                        e multiplicar
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 8
                                                                                                                                         e multiplicar
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
abla de multiplicar del 3
                        e multiplicar
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 9
                                                                                                                                         e multiplica

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 4
                        e multiplicar
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 10
                                                                                                                                          multiplicar

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 9 = 90
Tabla de multiplicar del 5
                        e multiplica

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
                                                                                                                                            10 x 10 = 100
                                                                                                              Process returned \theta (\thetax\theta) execution time : \theta.671 s
Press any key to continue.
```