

1. DATOS INFORMATIVOS

Carrera: Electrónica y automatización

Asignatura: Fundamentos de Programación

Tema del taller: Matrices

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Fecha: 07/12/2025 Paralelo: 29583

2. DESARROLLO

ejercicios de MTZ

1

```
int main()
{
    int matriz[MAX_FILAS][MAX_COLUMNAS];
    int N, M, suma = 0;

    printf("Ingrese numero de filas (max 10): ");
    scanf("%d", &N);

    printf("Ingrese numero de columnas (max 10): ");
    scanf("%d", &M);

    printf("Ingrese elementos por filas:\n");
    for(int i = 0; i < N; i++)
    {
        for(int j = 0; j < M; j++)

```

```
{
    scanf("%d", &matriz[i][j]);

    suma += matriz[i][j];

}

printf("La suma de los elementos es: %d\n", suma);

return 0;

}
```

*Untitled1.c - Code::Blocks 25.03

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Management Projects Symbols Files

Workspace

Ingresar numero de filas (max 10): 1
Ingresar numero de columnas (max 10): 1
Ingresar elementos por filas:
2
La suma de los elementos es: 2
Process returned 0 (0x0) execution time : 9.604 s
Press any key to continue.

File Line Message
==== Build file: "no target" in "no project" (compiler: unknown) ====
==== Build finished: 0 error(s), 0 warning(s) (0 minute(s), 19 second(s)) ===

C:\Users\richa\OneDrive\Documentos\prn\Richard Casa\Untitled1.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 16, Col 1, Pos 311 Insert Modified Read/Write default

<https://onlinegdb.com/9kFlfm8Xj>

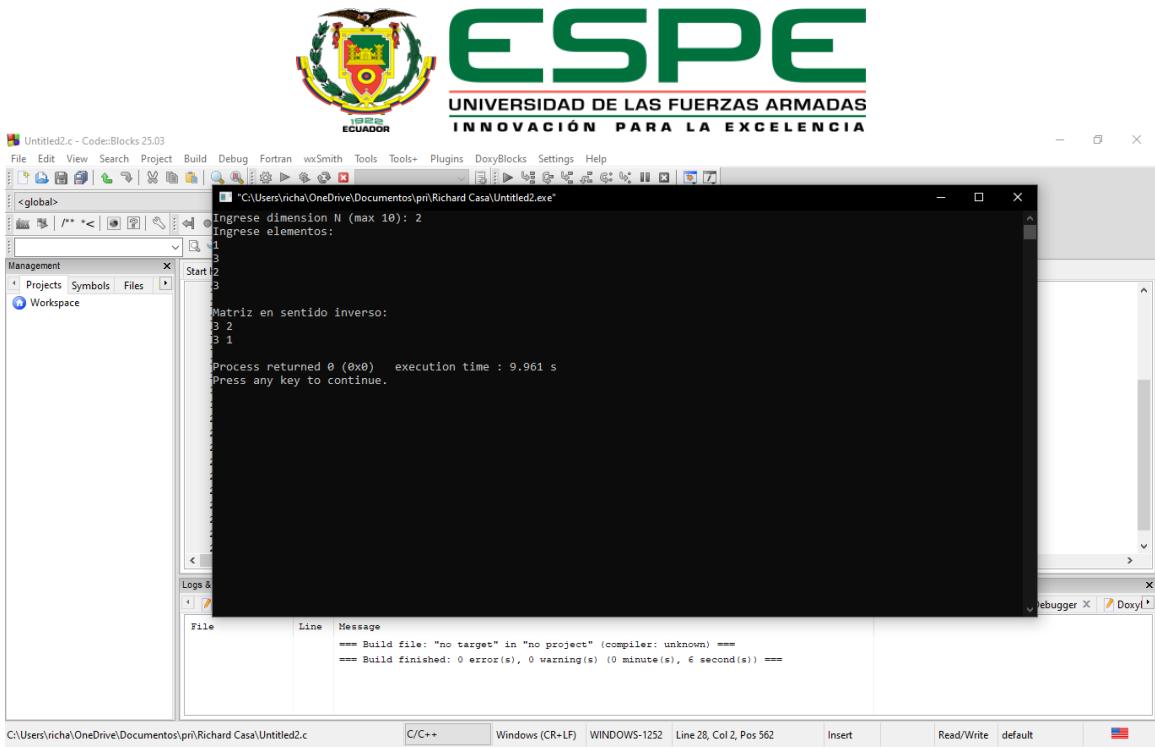
2

```
#include <stdio.h>
```

```
#define MAX 10
```



```
int main() {  
  
    int matriz[MAX][MAX];  
  
    int N;  
  
  
    printf("Ingrese dimension N (max 10): ");  
  
    scanf("%d", &N);  
  
  
    printf("Ingrese elementos:\n");  
  
    for(int i = 0; i < N; i++) {  
  
        for(int j = 0; j < N; j++) {  
  
            scanf("%d", &matriz[i][j]);  
  
        }  
  
    }  
  
  
    printf("\nMatriz en sentido inverso:\n");  
  
    for(int i = N-1; i >= 0; i--) {  
  
        for(int j = N-1; j >= 0; j--) {  
  
            printf("%d ", matriz[i][j]);  
  
        }  
  
        printf("\n");  
  
    }  
  
  
    return 0;  
}
```



3

```
#include <stdio.h>
```

```
#define MAX 10
```

```
int main() {
```

```
    int matriz[MAX][MAX];
```

```
    int N, fila;
```

```
    printf("Ingrese dimension N (max 10): ");
```

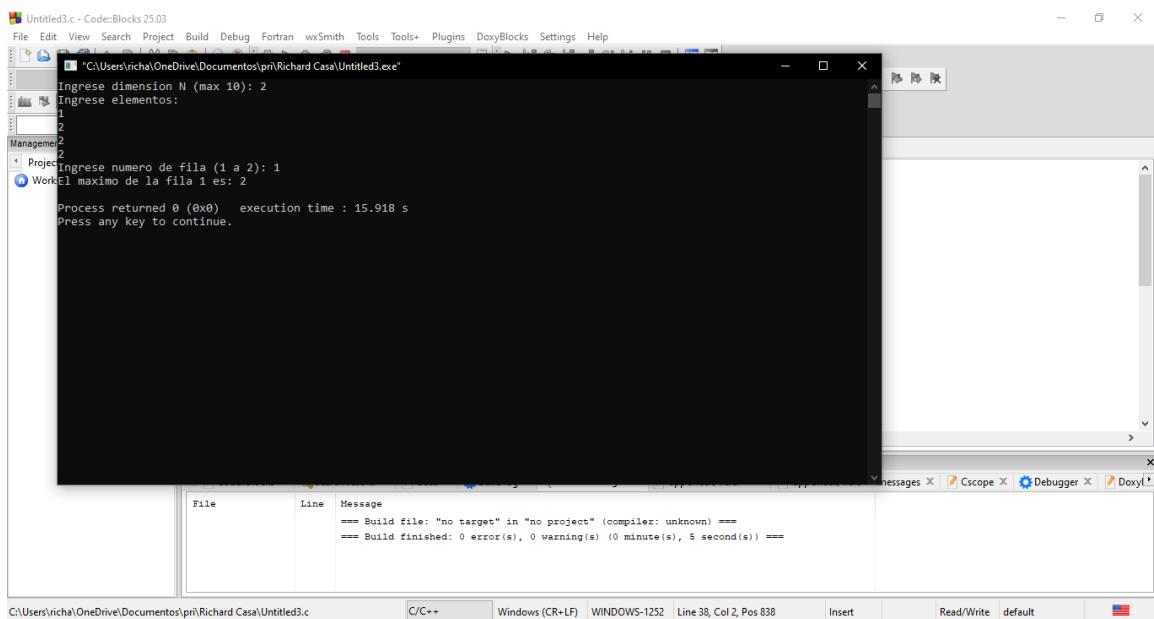
```
    scanf("%d", &N);
```

```
    printf("Ingrese elementos:\n");
```

```
    for(int i = 0; i < N; i++) {
```



```
for(int j = 0; j < N; j++) {  
  
    scanf("%d", &matriz[i][j]);  
  
}  
  
}  
  
  
printf("Ingrese numero de fila (1 a %d): ", N);  
  
scanf("%d", &fila);  
  
fila--; // Convertir a índice 0-based  
  
  
if(fila < 0 || fila >= N) {  
  
    printf("Fila invalida.\n");  
  
    return 1;  
  
}  
  
  
int max = matriz[fila][0]; // Inicializar con primer elemento  
  
for(int j = 1; j < N; j++) {  
  
    if(matriz[fila][j] > max) {  
  
        max = matriz[fila][j];  
  
    }  
  
}  
  
  
printf("El maximo de la fila %d es: %d\n", fila+1, max);  
  
  
return 0;  
}
```



Untitled3.c - Code::Blocks 25.03

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"C:\Users\richa\OneDrive\Documentos\prn\Richard Casa\Untitled3.exe"

Ingrese dimension N (max 10): 2
Ingrese elementos:
1
2
Management
Project Ingrese numero de fila (1 a 2): 1
Workset maximo de la fila 1 es: 2

Process returned 0 (0x0) execution time : 15.918 s
Press any key to continue.

Messages Cscope Debugger Doxygen

C:\Users\richa\OneDrive\Documentos\prn\Richard Casa\Untitled3.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 38, Col 2, Pos 838 Insert Read/Write default

<https://onlinegdb.com/Zl0ixcLBq>

4

```
#include <stdio.h>
```

```
#define MAX 10
```

```
int main() {
```

```
    int matriz[MAX][MAX];
```

```
    int N, i, j;
```

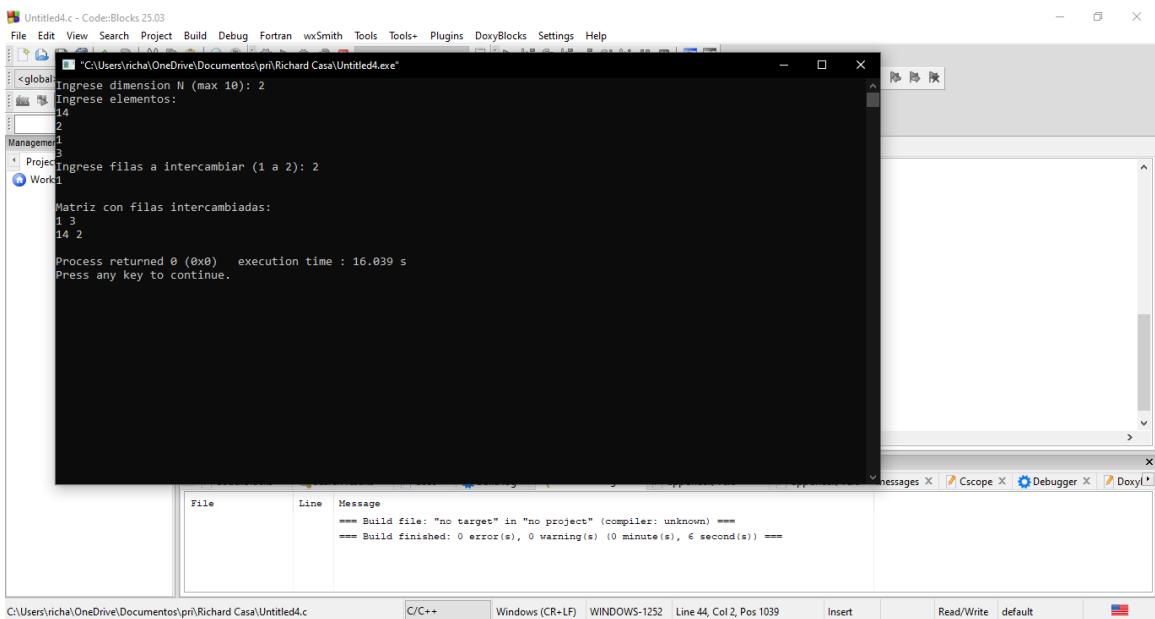
```
    printf("Ingrese dimension N (max 10): ");
```

```
    scanf("%d", &N);
```

```
    printf("Ingrese elementos:\n");
```

```
for(int fil = 0; fil < N; fil++) {  
  
    for(int col = 0; col < N; col++) {  
  
        scanf("%d", &matriz[fil][col]);  
  
    }  
  
}  
  
  
printf("Ingrese filas a intercambiar (1 a %d): ", N);  
  
scanf("%d %d", &i, &j);  
  
i--; j--; // Convertir a índice 0-based  
  
  
if(i < 0 || i >= N || j < 0 || j >= N) {  
  
    printf("Filas invalidas.\n");  
  
    return 1;  
  
}  
  
  
// Intercambiar filas i y j  
  
for(int col = 0; col < N; col++) {  
  
    int aux = matriz[i][col];  
  
    matriz[i][col] = matriz[j][col];  
  
    matriz[j][col] = aux;  
  
}  
  
  
printf("\nMatriz con filas intercambiadas:\n");  
  
for(int fil = 0; fil < N; fil++) {  
  
    for(int col = 0; col < N; col++) {  
  
    }
```

```
printf("%d ", matriz[fil][col]);  
  
}  
  
printf("\n");  
  
}  
  
return 0;  
  
}
```



https://onlinegdb.com/xA32lZ1_7