

1. DATOS INFORMATIVOS

Carrera: Electrónica y automatización

Asignatura: Fundamentos de Programación

Tema del taller: Matrices

Docente: Jenny Ruiz

Integrante: Richard Casa

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);

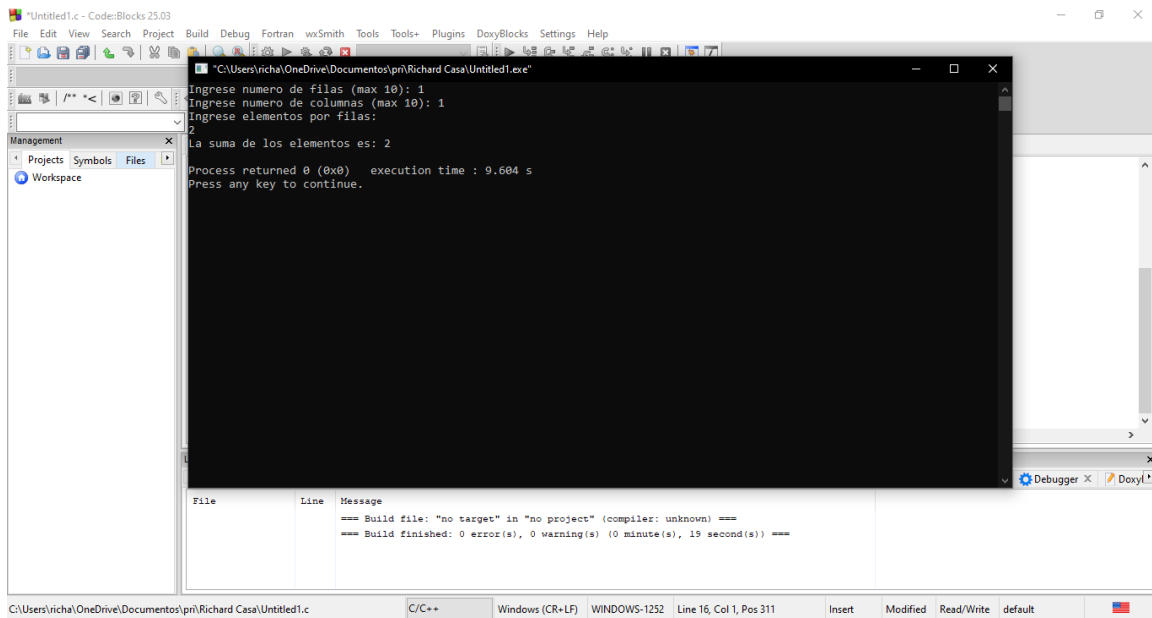
    printf("Ingrese numero de columnas (max 10): ");

    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;  
  
}
```



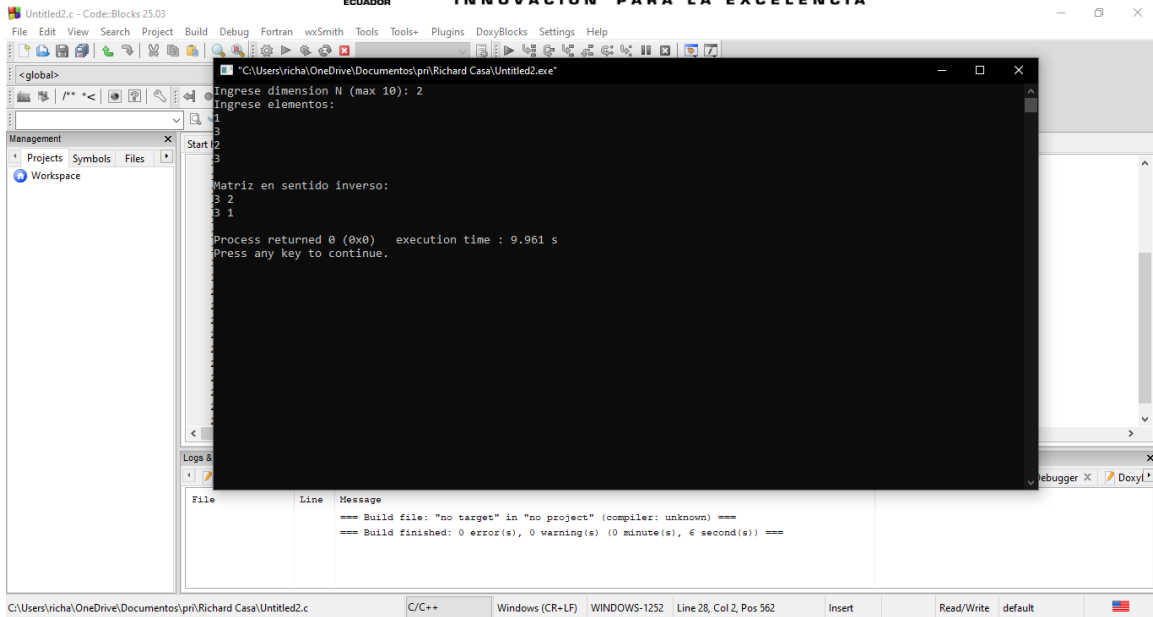
<https://onlinegdb.com/9kFlfm8Xi>

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;  
}
```



<https://onlinegdb.com/VBhcnembUT>

3

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

```
#define MAX 10
```

```
int main() {
```

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

```
    int N, fila;
```

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

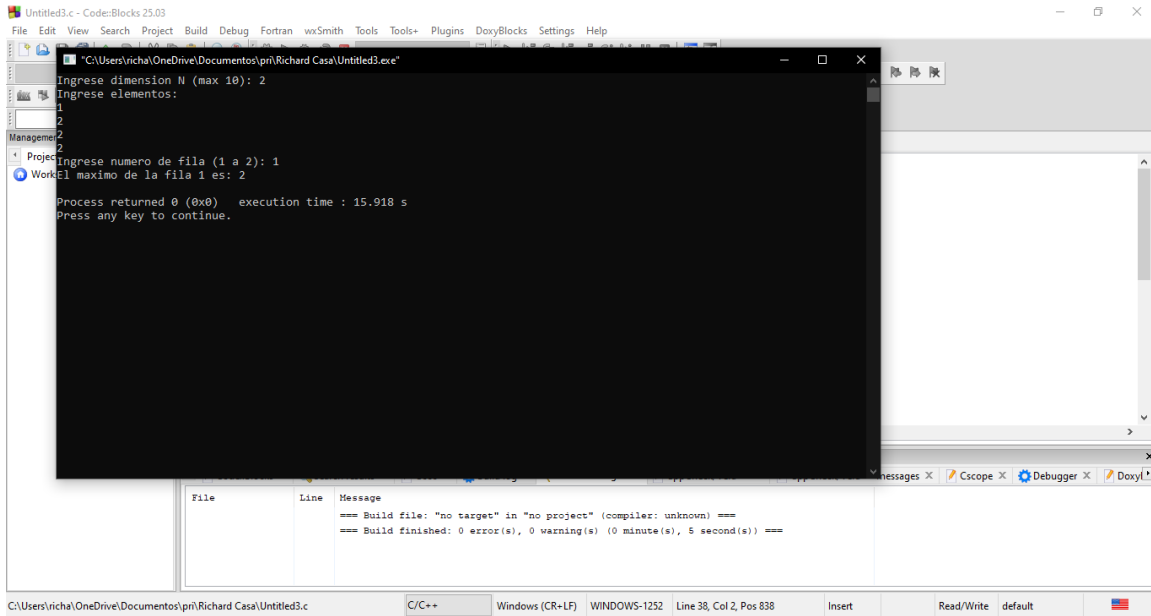
```
    scanf("%d", &N);
```

```
    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;  
}
```



<https://onlinegdb.com/ZlOixcLBq>

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;  
  
}
```

Code::Blocks 25.03
File Edit View Search Project Build Debug Fortran wxSmith Tools Tools+ Plugins DovyBlocks Settings Help

*C:\Users\richa\OneDrive\Documents\prn\Richard Casa\Untitled4.exe

Ingrese dimension N (max 10): 2
Ingrese elementos:
14
2
2
1
3
Ingrese filas a intercambiar (1 a 2): 2
Matriz con filas intercambiadas:
1 3
14 2
Process returned 0 (0x0) execution time : 16.039 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), 6 second(s)) ===

C:\Users\richa\OneDrive\Documents\prn\Richard Casa\Untitled4.c C/C++ Windows (CR+LF) WINDOWS-1252 Line 44, Col 2, Pos 1039 Insert Read/Write default

https://onlinegdb.com/xA32IZ1_7