

```

using System;

0 references
class Program
{
    0 references
    static void Main()
    {
        Console.WriteLine("Enter the first string: ");
        string str1 = Console.ReadLine();

        Console.WriteLine("Enter the second string: ");
        string str2 = Console.ReadLine();

        bool areEqual = string.Compare(str1, str2) == 0;

        if (areEqual)
        {
            Console.WriteLine("The strings are equal.");
        }
        else
        {
            Console.WriteLine("The strings are not equal.");
        }
    }
}

```

```

Microsoft Visual Studio Debug Console
Enter the first string: mohamed
Enter the second string: mohamed
The strings are equal.

C:\Users\Mohamed Hegazy\source\repos\sheet2.1\sheet2.1\bin\Debug\net8.0\sheet2.1.exe (process 5692) exited with code 0 (0x0).
Press any key to close this window . . .

```

```

1  using System;
2
3  0 references
4  class Program
5  {
6      0 references
7      static void Main()
8      {
9          Console.Write("Enter the length of the rectangle: ");
10         double length = Convert.ToDouble(Console.ReadLine());
11
12         Console.Write("Enter the width of the rectangle: ");
13         double width = Convert.ToDouble(Console.ReadLine());
14
15         double perimeter = 2 * (length + width);
16         Console.WriteLine($"The perimeter of the rectangle is: {perimeter}");
17     }
18 }

```

Microsoft Visual Studio Debug Console

```

Enter the length of the rectangle: 4
Enter the width of the rectangle: 5
The perimeter of the rectangle is: 18

C:\Users\Mohamed Hegazy\source\repos\sheet1.2\sheet1.2\bin\Debug\net8.0\sheet1.2.exe (process 87384) exited with code 0 (0x0).
Press any key to close this window . . .

```

```

case 2:
    Console.Write("Enter amount to deposit: ");
    amount = int.Parse(Console.ReadLine());
    balance += amount;
    Console.WriteLine($"Amount deposited. New balance is: {balance}");
    break;
case 3:
    Console.Write("Enter amount to withdraw: ");
    amount = int.Parse(Console.ReadLine());
    if (amount <= balance)
    {
        balance -= amount;
        Console.WriteLine($"Amount withdrawn. New balance is: {balance}");
    }
    else
    {
        Console.WriteLine("Insufficient balance!");
    }
    break;
case 4:
    Console.WriteLine("Thank you for using the ATM. Goodbye!");
    break;
default:
    Console.WriteLine("Invalid choice. Please try again.");
    break;
}
} while (choice != 4);
}

```

Microsoft Visual Studio Debug Console

```

ATM Machine
1. Check Balance
2. Deposit
3. Withdraw
4. Exit
Enter your choice: 2
Enter amount to deposit: 2000
Amount deposited. New balance is: 3000

ATM Machine
1. Check Balance
2. Deposit
3. Withdraw
4. Exit
Enter your choice: 3
Enter amount to withdraw: 1500
Amount withdrawn. New balance is: 1500

ATM Machine
1. Check Balance
2. Deposit
3. Withdraw
4. Exit
Enter your choice: 4
Thank you for using the ATM. Goodbye!

C:\Users\Mohamed Hegazy\source\repos\sheet3.1\sheet3.1\bin\Debug\net8.0\sheet3.1.exe (process 31812)
exited with code 0 (0x0).
Press any key to close this window . . .

```

using System;

0 references

class Program

{

0 references

static void Main()

{

int balance = 1000;

int amount;

int choice;

do

{

Console.WriteLine("\nATM Machine");

Console.WriteLine("1. Check Balance");

Console.WriteLine("2. Deposit");

Console.WriteLine("3. Withdraw");

Console.WriteLine("4. Exit");

Console.Write("Enter your choice: ");

choice = int.Parse(Console.ReadLine());

switch (choice)

{

case 1:

Console.WriteLine(\$"Your balance is: {balance}");

break;

case 2:

Console.Write("Enter amount to deposit: ");

amount = int.Parse(Console.ReadLine());

```
1  using System;
2
3  0 references
4  class Program
5  {
6      0 references
7      static void Main()
8      {
9          Console.Write("Enter the radius of the circle: ");
10         double radius = Convert.ToDouble(Console.ReadLine());
11
12         double perimeter = 2 * Math.PI * radius;
13         Console.WriteLine($"The perimeter of the circle is: {perimeter}");
14     }
15 }
```

Microsoft Visual Studio Debug Console

Enter the radius of the circle: 5  
The perimeter of the circle is: 31.41592653589793

C:\Users\Mohamed Hegazy\source\repos\shee1.1\shee1.1\bin\Debug\net8.0\shee1.1.exe (process 35456) exited with code 0 (0x0).

Press any key to close this window . . .



```

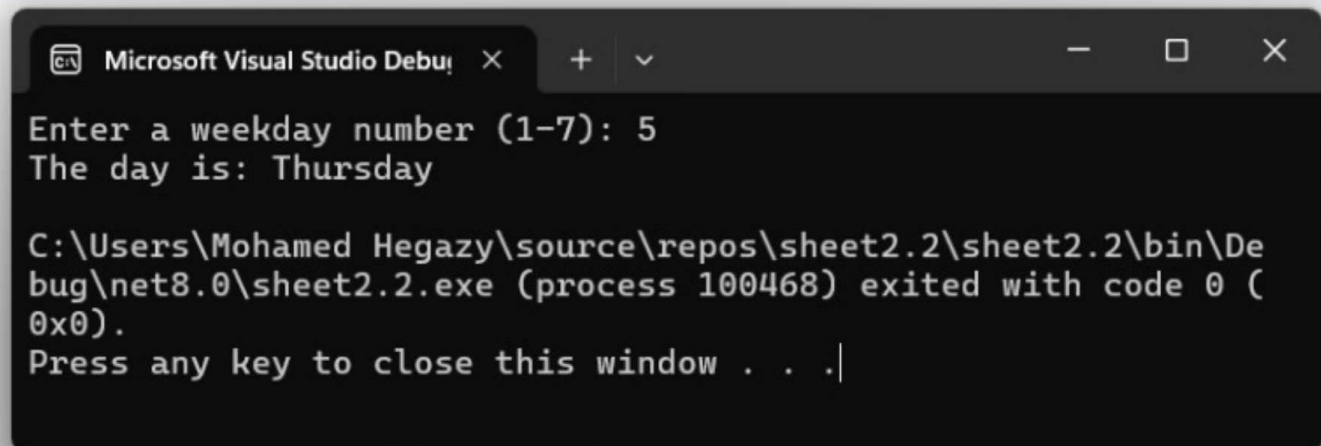
using System;
0 references
class Program
0 references
{
    static void Main()
    {
        Console.Write("Enter a weekday number (1-7): ");
        int dayNumber = Convert.ToInt32(Console.ReadLine());

        string dayName;

        switch (dayNumber)
        {
            case 1:
                dayName = "Sunday";
                break;
            case 2:
                dayName = "Monday";
                break;
            case 3:
                dayName = "Tuesday";
                break;
            case 4:
                dayName = "Wednesday";
                break;
            case 5:
                dayName = "Thursday";
                break;
            case 6:
                dayName = "Friday";
                break;
            case 7:
                dayName = "Saturday";
                break;
            default:
                dayName = "Invalid weekday number.";
                break;
        }

        Console.WriteLine($"The day is: {dayName}");
    }
}

```



```

Microsoft Visual Studio Debug Console
Enter a weekday number (1-7): 5
The day is: Thursday

C:\Users\Mohamed Hegazy\source\repos\sheet2.2\sheet2.2\bin\Debug\net8.0\sheet2.2.exe (process 100468) exited with code 0 (0x0).
Press any key to close this window . . .

```

```
using System;
```

0 references

```
class Program
```

```
{
```

0 references

```
static void Main()
```

```
{
```

```
    Console.Write("Enter a string: ");
```

```
    string input = Console.ReadLine();
```

```
    Console.Write("Enter the desired total length: ");
```

```
    int totalLength = int.Parse(Console.ReadLine());
```

```
    Console.Write("Enter the padding character: ");
```

```
    char paddingChar = Console.ReadKey().KeyChar;
```

```
    Console.WriteLine();
```

```
    string paddedString = input;
```

```
    while (paddedString.Length < totalLength)
```

```
    {
```

```
        paddedString += paddingChar;
```

```
    }
```

```
    Console.WriteLine($"Padded string: {paddedString}");
```

```
}
```

```
}
```

Microsoft Visual Studio Debug Console

Enter a string: mohame

Enter the desired total length: 7

Enter the padding character: d

Padded string: mohamed

C:\Users\Mohamed Hegazy\source\repos\sheet5.1\sheet5.1\bin\Debug\net8.0\sheet5.1.exe (process 96780) exited with code 0 (0)

```
using System;
```

0 references

```
class Program
```

```
{
```

0 references

```
static void Main()
```

```
{
```

```
    Console.Write("Enter the number of elements in the array: ");
```

```
    int n = int.Parse(Console.ReadLine());
```

```
    int[] array = new int[n];
```

```
    int sum = 0;
```

```
    for (int i = 0; i < n; i++)
```

```
    {
```

```
        Console.Write($"Enter element {i + 1}: ");
```

```
        array[i] = int.Parse(Console.ReadLine());
```

```
        sum += array[i];
```

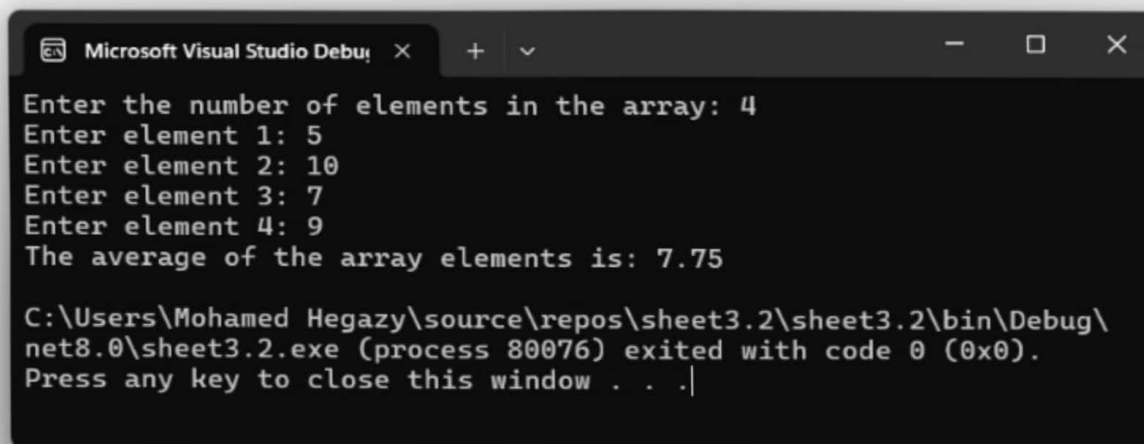
```
    }
```

```
    double average = (double)sum / n;
```

```
    Console.WriteLine($"The average of the array elements is: {average}");
```

```
}
```

```
}
```



```
Microsoft Visual Studio Debug Console
Enter the number of elements in the array: 4
Enter element 1: 5
Enter element 2: 10
Enter element 3: 7
Enter element 4: 9
The average of the array elements is: 7.75

C:\Users\Mohamed Hegazy\source\repos\sheet3.2\sheet3.2\bin\Debug\net8.0\sheet3.2.exe (process 80076) exited with code 0 (0x0).
Press any key to close this window . . .
```



```
using System;
```

0 references

```
class Program
```

```
{
```

0 references

```
static void Main()
```

```
{
```

```
    Console.Write("Enter a string: ");
```

```
    string input = Console.ReadLine();
```

```
    Console.Write("Enter the starting index: ");
```

```
    int startIndex = int.Parse(Console.ReadLine());
```

```
    Console.Write("Enter the number of characters to copy: ");
```

```
    int length = int.Parse(Console.ReadLine());
```

```
    char[] charArray = new char[length];
```

```
    input.CopyTo(startIndex, charArray, 0, length);
```

```
    Console.WriteLine("Copied characters:");
```

```
    foreach (char c in charArray)
```

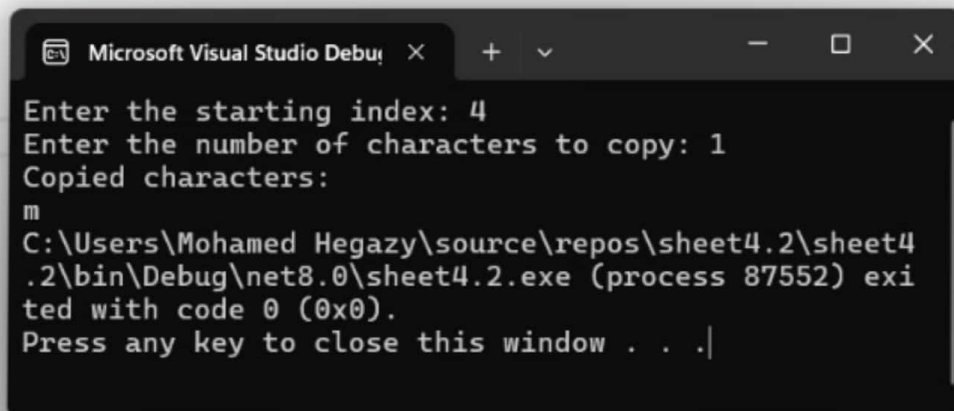
```
    {
```

```
        Console.Write(c + " ");
```

```
    }
```

```
}
```

```
}
```



```
Microsoft Visual Studio Debug Console
Enter the starting index: 4
Enter the number of characters to copy: 1
Copied characters:
m
C:\Users\Mohamed Hegazy\source\repos\sheet4.2\sheet4
.2\bin\Debug\net8.0\sheet4.2.exe (process 87552) exited
with code 0 (0x0).
Press any key to close this window . . .
```

```
using System;
```

0 references

```
class Program
```

```
{
```

0 references

```
static void Main()
```

```
{
```

```
    Console.Write("Enter a string: ");
```

```
    string input = Console.ReadLine();
```

```
    char[] vowels = { 'a', 'e', 'i', 'o', 'u', 'A', 'E', 'I', 'O', 'U' };
```

```
    int vowelCount = 0;
```

```
    foreach (char c in input)
```

```
    {
```

```
        if (Array.Exists(vowels, v => v == c))
```

```
        {
```

```
            vowelCount++;
```

```
        }
```

```
    }
```

```
    Console.WriteLine($"The total number of vowels is: {vowelCount}");
```

```
}
```

```
}
```

Microsoft Visual Studio

Enter a string: mohamed  
The total number of vowels is: 3

C:\Users\Mohamed Hegazy\source\repos\sheet5.2\sheet5.2\bin\Debug\net8.0\sheet5.2.exe (process 19936) exited with code 0 (0x0).  
Press any key to close this window . . .

using System;

2 references

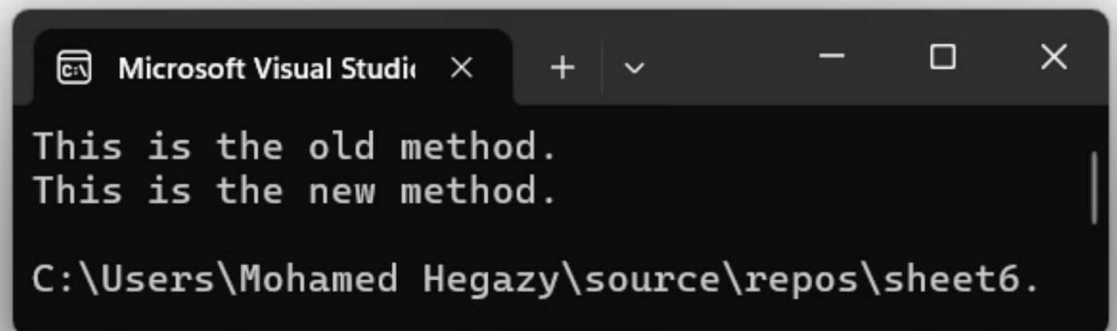
class MyClass

```
{  
    [Obsolete("This method is obsolete. Use NewMethod instead.")]  
    1 reference  
    public void OldMethod()  
    {  
        Console.WriteLine("This is the old method.");  
    }  
    1 reference  
    public void NewMethod()  
    {  
        Console.WriteLine("This is the new method.");  
    }  
}
```

0 references

class Program

```
{  
    0 references  
    static void Main()  
    {  
        MyClass obj = new MyClass();  
        obj.OldMethod(); // تحذير سيظهر بسبب استخدام طريقة قديمة  
        obj.NewMethod();  
    }  
}
```



using System;

references

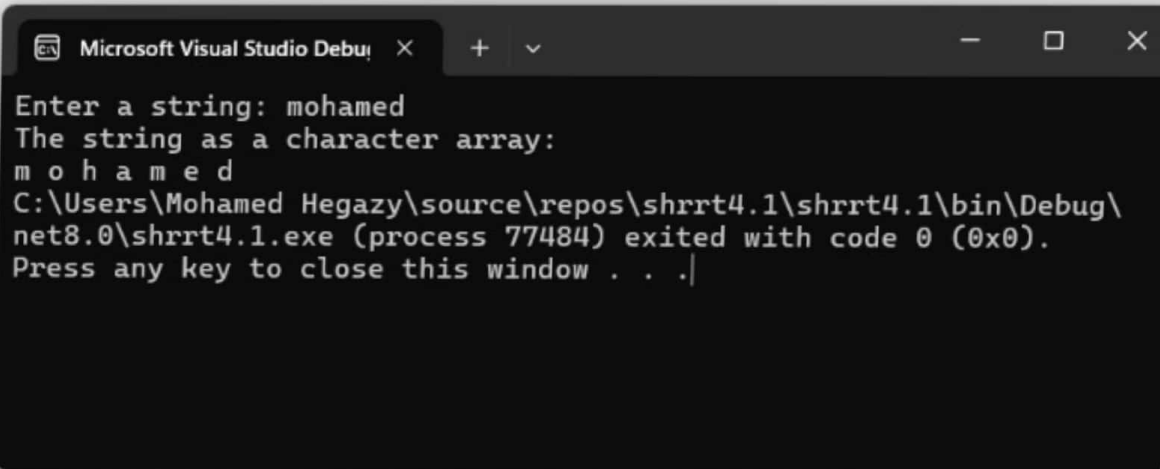
class Program

0 references

```
static void Main()
{
    Console.Write("Enter a string: ");
    string input = Console.ReadLine();

    // Convert the string to a character array
    char[] charArray = input.ToCharArray();

    // Display the character array
    Console.WriteLine("The string as a character array:");
    foreach (char c in charArray)
    {
        Console.Write(c + " ");
    }
}
```



```
Microsoft Visual Studio Debug Console
Enter a string: mohamed
The string as a character array:
m o h a m e d
C:\Users\Mohamed Hegazy\source\repos\shrirt4.1\shrirt4.1\bin\Debug\net8.0\shrirt4.1.exe (process 77484) exited with code 0 (0x0).
Press any key to close this window . . .|
```

```
#define DEMO_WARNING
```

```
using System;
```

0 references

```
class Program
```

```
{
```

0 references

```
static void Main()
```

```
{
```

```
    Console.WriteLine("This program demonstrates the #warning preprocessor directive.");
```

```
}
```

```
}
```

```
#warning This is a compiler warning message for demonstration purposes.
```



```
using System;
```

0 references

```
class Program
```

```
{
```

1 reference

```
unsafe static void Swap(int* a, int* b)
```

```
{
```

```
    int temp = *a;
```

```
    *a = *b;
```

```
    *b = temp;
```

```
}
```

0 references

```
unsafe static void Main()
```

```
{
```

```
    int num1 = 10, num2 = 20;
```

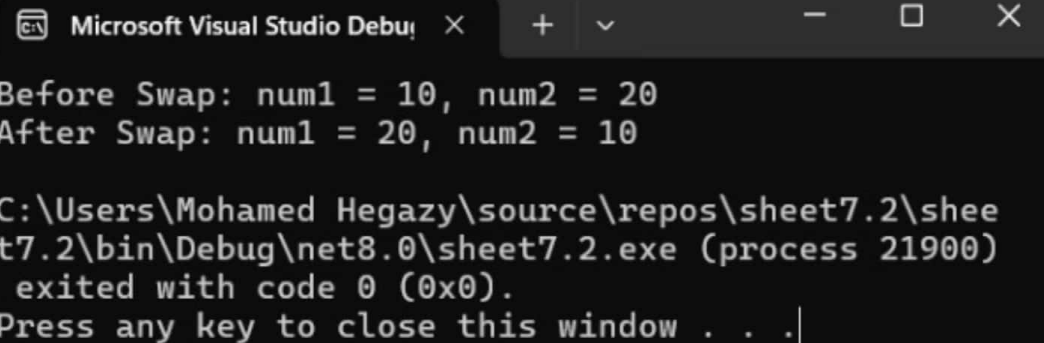
```
    Console.WriteLine($"Before Swap: num1 = {num1}, num2 = {num2}");
```

```
    Swap(&num1, &num2);
```

```
    Console.WriteLine($"After Swap: num1 = {num1}, num2 = {num2}");
```

```
}
```

```
}
```



Microsoft Visual Studio Debug Console window showing the output of a swap program. The window title is "Microsoft Visual Studio Debug Console". The output text is:

```
Before Swap: num1 = 10, num2 = 20
After Swap: num1 = 20, num2 = 10

C:\Users\Mohamed Hegazy\source\repos\sheet7.2\sheet7.2\bin\Debug\net8.0\sheet7.2.exe (process 21900)
exited with code 0 (0x0).
Press any key to close this window . . .|
```