

Using Split() and Join() Labs

Perform these labs on your own computer using Visual Studio 2022 or later, or VS Code 1.8x or later, to ensure you understand the lessons presented in the corresponding videos and lectures.

Lab 1: Create an Array from a String Using Split()

Open **Visual Studio** or **VS code** and create a new **console** application.
Modify the **Program.cs** file to look like the following.

```
string sentence;
string[] arr;

//*****
// Split() Samples
//*****
sentence = "This is a normal sentence.";
// If no delimiter is passed, any white space is
considered a delimiter
arr = sentence.Split();
foreach (string str in arr) {
    Console.WriteLine(str);
}
Console.WriteLine();

sentence = "This is a normal sentence.";
// Set the delimiter to split the string on
arr = sentence.Split(' ');
foreach (string str in arr) {
    Console.WriteLine(str);
}
Console.WriteLine();

sentence = "1,2,3,4";
// Splitting on commas
arr = sentence.Split(',');
foreach (string str in arr) {
    Console.WriteLine(str);
}
Console.WriteLine();
```

Try It Out

Run the application to see the results.

Lab 2: Using Multiple Delimiters with the Split() Method

Add to the **Program.cs** file.

```
// May specify more than one delimiter
sentence = "This is sentence 1. This is sentence 2.";
arr = sentence.Split(' ', '.');
foreach (string str in arr) {
    Console.WriteLine(str);
}
Console.WriteLine();

// If you have a space between each comma
// and you specify a space as a delimiter
// You get an array element for each space
sentence = "1, 2, 3, 4";
arr = sentence.Split(' ', ',', '');
foreach (string str in arr) {
    Console.WriteLine(str);
}
Console.WriteLine();
```

Try It Out

Run the application to see the results.

Lab 3: Create a String from an Array Using the Join() Method

Add to the **Program.cs** file.

```
/**
//*****
// Join() Samples
//*****
arr = ["This", "is", "a", "sentence."];
sentence = string.Join(' ', arr);
Console.WriteLine(sentence);
Console.WriteLine();
```

Try It Out

Run the application to see the results.

Lab 4: Create a String from an Array Without a Delimiter

Add to the **Program.cs** file.

```
// If a null is passed, and empty string is used
arr = ["This", "is", "a", "sentence."];
sentence = string.Join(null, arr);
Console.WriteLine(sentence);
Console.WriteLine();
```

Try It Out

Run the application to see the results.

Lab 5: Create a String from a List<T> Collection

Add to the **Program.cs** file.

```
List<string> list = ["A", "sentence", "from", "a
List<T>."];
sentence = string.Join(' ',[.. list]);
//sentence = string.Join(' ', list.ToArray());
Console.WriteLine(sentence);
Console.WriteLine();
```

Try It Out

Run the application to see the results.