# Splitting String

Removing values from csv strings

## Topics

- Splitting Strings
- Multiple Delimiters
- Removing Empties

# Splitting Strings

## Comma-Separated Values

- Sometimes, data is stored inside of strings.
- The data in the string is separated by a character (or multiple characters) called delimiters.
- Delimiters make it is easy to separate the data from each other.

**EXAMPLES**: "The quick brown fox jumps over the lazy dog" The delimiter that separates the data is the space ('').

### Delimiters

#### **EXAMPLES:**

"The quick brown fox jumps over the lazy dog"

The delimiter that separates the data is the space ('').

"Thor Captain America Iron Man"

The delimiter that separates the data is the vertical bar ('|').

"Thor, Captain America, Iron Man"

The delimiter that separates the data is the comman (',').

## How do we get the data out of the string?

- Use the Split method of the string to get the values in a string array.
- When splitting, you specify a delimiter (or separator) so the Split method knows how to separate the data.

In this example, '-' is the delimiter.

```
string data = "A-B-C-D-E-F-G";
string[] letters = data.Split('-');
```

## #1 Split Challenge with 1 Delimiter

- Create a string variable and give it this value: "Joker,Riddler,Catwoman,Twoface,Bane"
- Split the string to get the string array
- Print the string array

#### Example:

```
string data = "A-B-C-D-E-F-G";
string[] letters = data.Split('-');
```

#### LINKS

**Split** 

#### SLIDES

Split How-To

## Multiple Delimiters

### Multiple Delimiters

- Some strings have data that is separated using more than 1 delimiter.
- Pass a char array to the split method to specify more than 1 delimiter.
   In this example, '-' and ',' are the delimiters.

```
string code = "A-B-C,1,2,3,D-E-F,4,5,6";
string[] codes = code.Split(new char[] { '-', ',' });
```

## Removing Empties

- Sometimes 2 delimiters are right next to each other in the string. The Split method will generate an empty entry in the array.
- To remove the empty entries, pass an StringSplitOptions.RemoveEmptyEntries to the method.

```
string code = "A-B-C,,,,D-E-F,4,5,6";
string[] codes = code.Split(new char[] { '-', ',' }, StringSplitOptions.RemoveEmptyEntries);
```

## #2 Split with multiple delimiters

LINKS
Split

- Create a string variable and give it this value:
   "Joker,,,Riddler,Catwoman,,Twoface,Bane|Gordon||Barbara"
- Split the string to get the string array of names. Make sure you remove the empty entries.
- Print the string array.

### SLIDES

Multiple Delims How-To

#### Example:

```
string code = "A-B-C,,,,D-E-F,4,5,6";
string[] codes = code.Split(new char[] { '-', ',' }, StringSplitOptions.RemoveEmptyEntries);
```