

# Short Scale String

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## Introduction

**Short Scale String** is a method that converts a numeric input (int, float, or double) and returns a string of the short scale representation of that value. When large numbers need to be represented in an easily readable fashion it is advantageous to use this method.

Short scale representation is a number naming system for powers of ten. In short scale representation, each term is a thousand times greater than the previous. This method is adopted throughout the US and UK as a recognized numbering scale. For example, the number 1,000,000 in short scale is written as 1 million. This continues through all accepted short scale terms up to and including centillion.

Remember that ShortScaleString returns a **string** type of the input value.

## Parser Methods

The ShortScaleString script has 3 methods for parsing through the value types of int, float, and double. It is important to be conscious of the limitations of each value type. The three methods are:

`ShortScaleString.parseDouble(double value, int precision, double startShortScale);`

`ShortScaleString.parseFloat(float value, int precision, float startShortScale);`

`ShortScaleString.parseInt(int value, int precision, int startShortScale);`

**value:** the int, float, or double value for the corresponding parser that is the value to parse through.

**precision:** the decimal value of precision to represent when representing as a short scale value. Recall that each value type has limitations to the amount of precision that can be displayed. By default this value is set to 3.

**startShortScale:** the value to begin showing numbers in short scale. This is useful if the user does not want to begin representing in short scale until a certain value point. All values lower than 1000 are represented by their regular value. By default this value is set to 1,000,000.

## Example

The following code snippet shows the ease of using the ShortScaleString method. This example is used in the demo scene of the asset.

```
1 using UnityEngine;
2 using System.Collections;
3 using UnityEngine.UI;
4
5 public class ShortScaleExample : MonoBehaviour {
6
7     public InputField inputTarget;
8     double inputValue;
9     public Text outputTarget;
10
11     void Update () {
12
13         inputValue = double.Parse (inputTarget.text);
14         outputTarget.text = ShortScaleString.parseDouble (inputValue);
15
16     }
17 }
```

On line 14, the text component of the outputTarget text object is set to the string returned from the method. Notice that “inputValue” is the only parameter provided. This is allowed because the other parameters automatically take on their default values if they are left out.

Because the given example pulls the string from an inputField, the double.Parse method is used to retrieve the correct value on line 13.