

## Creating and Adding

A list is a sequential data structure that can hold any type. Like arrays, you can use them to store any sequential information, like the letters of the alphabet, comments on a blogpost, the finishing times for a horse race, or items on a restaurant menu.

You create a list using the `new` keyword, like you would create any other class. You specify the type of element inside angle brackets: `< >`. In this example, the list is named `citiesList` and it holds instances of the type `string`.

```
List<string> citiesList = new List<string>();
```

You can add elements to the list using the `Add()` method:

```
citiesList.Add("Delhi");
```

You can access elements using indices and square brackets:

```
string city = citiesList[0];
```

You can also re-assign elements using bracket notation:

```
citiesList[0] = "New Delhi";
```

In order to use lists, you'll need to add this to the top of your file. We'll explain this in detail later:

```
using System.Collections.Generic;
```

### ☒ Instructions

1.

Create a list to hold the top women's marathon times in hours. Create an empty list of type `double` and stored it in a variable `marathons`.

Hint



Here's an example that creates an empty list of `string` objects and stores it in the variable `birds`:

```
List<string> birds = new List<string>();
```

On many keyboards, you can find the angle brackets above the comma ( `,` ) and period ( `.` ) keys. If they aren't there, you can copy them from this code snippet:

```
< >
```

2.

[Jemima Sumgong](#) won the 2016 marathon in Rio de Janeiro with a time of `144.07` minutes and [Tiki Gelana](#) won the 2012 marathon in London with a time of `143.12` minutes. (That's just two hours and 23 seconds!)

Use two `Add()` statements to add those values to the list.

Hint



Here's an example that adds the string `"toucan"` to the list of `birds`:

```
birds.Add("toucan");
```

3.

Print the second value in the list to the console.

Hint



Lists begin with index `0`, so the second element in the list would be at index `1`.