

# ArrayList Lab

## Lab 1: Create and Add to ArrayList

Open the **Program.cs** file and replace the entire contents of the file to the following code.

```
using System.Collections;

ArrayList arr = new();

Console.WriteLine(arr.Count);

Console.WriteLine();
arr.Add(1);
arr.Add("10 Speed Bicycle");
arr.Add(true);
arr.Add(DateTime.Now);

foreach (var item in arr) {
    Console.WriteLine(item);
}

Console.WriteLine();
Console.WriteLine(arr.Count);
```

## Try It Out

Run the application and view the output.

## Alternate Syntax

Open the **Program.cs** file and replace the entire contents of the file to the following code.

```
using System.Collections;

ArrayList arr = new() {
    1,
    "10 Speed Bicycle",
    true,
    DateTime.Now
};

foreach (var item in arr) {
    Console.WriteLine(item);
}
```

### Try It Out

Run the application and view the output.

## Lab 2: Change an Element

Open the **Program.cs** file and replace the entire contents of the file to the following code.

```
using System.Collections;

ArrayList arr = new() {
    1,
    "10 Speed Bicycle",
    true,
    DateTime.Now
};

// Change an element
arr[1] = "Brake Pad";

foreach (var item in arr) {
    Console.WriteLine(item);
}
```

### Try It Out

Run the application and view the output.

## Lab 3: Remove an Element

Open the **Program.cs** file and replace the entire contents of the file to the following code.

```
using System.Collections;

ArrayList arr = new() {
    1,
    "10 Speed Bicycle",
    true,
    DateTime.Now
};

// Remove an element at index
arr.RemoveAt(2);

// Remove an element by value
arr.Remove("10 Speed Bicycle");

foreach (var item in arr) {
    Console.WriteLine(item);
}
```

### Try It Out

Run the application and view the output.