class SampleCollection<T>

{

// Declare an array to store the data elements.

private T[] arr = new T[100];

// Define the indexer, which will allow client code

// to use [] notation on the class instance itself.

// (See line 2 of code in Main below.)

public T this[int i]

{

get

{

// This indexer is very simple, and just returns or sets

// the corresponding element from the internal array.

return arr[i];

}

set

{

arr[i] = value;

}

}

}

// This class shows how client code uses the indexer.

class Program

{

static void Main(string[] args)

{

// Declare an instance of the SampleCollection type.

SampleCollection<string> stringCollection = new SampleCollection<string>();

// Use [] notation on the type.

stringCollection[0] = "Hello, World";

System.Console.WriteLine(stringCollection[0]);

}

}

// Output:

// Hello, World.