

C# Lab Tutorials

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** Please Note that I'm typing out the answers in a word/pdf file and uploading it to github since I own an iPad and VSCode is not available on my device. Please excuse me and I apologize for any inconvenience caused. Thank you. **

07)

```
○ namespace lab07Q7
○ {
○     internal class Program
○     {
○         static void Main(string[] args)
○         {
○             var random = new Random();
○
○             int size = int.Parse(Console.ReadLine());
○
○             Console.WriteLine();
○
○             int[] array1 = new int[size];
○             int[] array2 = new int[size];
○
○             for (int i = 0; i < size; i++)
○             {
○                 array1[i] = random.Next(0, 100);
○                 array2[i] = random.Next(0, 100);
○             }
○
○             int scalarSum = 0;
○             for (int i = 0; i < size; i++)
○             {
○                 scalarSum += array1[i];
○             }
○
○             int[] vectorSum = new int[size];
○             for (int i = 0; i < size; i++)
○             {
○                 vectorSum[i] = array1[i] + array2[i];
○             }
○
○             int[] vectorProduct = new int[size];
○             for (int i = 0; i < size; i++)
```

```

○      {
○          vectorProduct[i] = array1[i] * array2[i];
○      }
○
○      int scalarProduct = 0;
○      for (int i = 0; i < size; i++)
○      {
○          scalarProduct += vectorProduct[i];
○      }
○
○      Console.WriteLine("Scalar sum: " + scalarSum);
○      Console.Write("Vector sum: ");
○      foreach (int value in vectorSum)
○      {
○          Console.Write(value + " ");
○      }
○
○      Console.WriteLine();
○
○      Console.Write("Vector product: ");
○
○      foreach (int value in vectorProduct)
○      {
○          Console.Write(value + " ");
○      }
○
○      Console.WriteLine();
○      Console.WriteLine("Scalar product: " + scalarProduct);
○
○      Console.ReadLine();
○    }
○  }
○ }

```

08)

❖ Animals

```

○ namespace lab07Q8
○ {
○     internal class Animal
○     {
○         public void animal()
○         {
○             Console.WriteLine("I am an animal");
○         }
○     }
○     internal class Dog:Animal
○     {
○         public void dog()

```

- {
- Console.WriteLine("I have four legs");
- }
- }
- }

❖ Program

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