Task
How to write a program to check whether the input alphabet is a vowel or not using switch case.

Solution (C#)

```csharp
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace IsVowel
{
    class Program
    {
        //create the structure where we will contain statistic information about vowels
        public struct Vowel
        {
            private int[] Position;      // positions of vowel in the string
            private int count;           // number of vowel enteries into string
            private char symbol;          // vowel

            public Vowel(char s)         // initial constructor
            {
                symbol = s;
                count = 0;
                Position = new int[256];
            }

            public void Add(int p)       // to add the information about vowels entry
            {
                count++;
                Position[count - 1] = p;
            }

            public int[] Positions       // return array with positions
            {
                get { return Position; }
            }

            public char Symbol           // return vowel symbol
            {
                get { return symbol; }
            }

            public int Count             // return number of vowels entries
            {
                get { return count; }
            }
```

```csharp
        }

    static void Main(string[] args)
    {
        // vowels structures for gathering statistic
        Vowel vowelA, vowelE, vowelI, vowelO, vowelU, vowelY;
        vowelA = new Vowel('a');
        vowelE = new Vowel('e');
        vowelI = new Vowel('i');
        vowelO = new Vowel('o');
        vowelU = new Vowel('u');
        vowelY = new Vowel('y');

        Console.WriteLine("Enter char string:");
        // enter string
        string str = Console.ReadLine();
        // convert string symbols to low case
        str = str.ToLower();
        // check string chars
        for(int i=0; i<str.Length; i++)
        {
            switch (str[i])
            {
                case 'a': vowelA.Add(i);
                    break;
                case 'e': vowelE.Add(i);
                    break;
                case 'i': vowelI.Add(i);
                    break;
                case 'o': vowelO.Add(i);
                    break;
                case 'u': vowelU.Add(i);
                    break;
                case 'y': vowelY.Add(i);
                    break;
            }
        }
        // printing results
        Console.WriteLine("The statistic of vowels in the string is:");
        Console.WriteLine("a - {0}\t e - {1}\t i - {2}\t o - {3}\t u - {4}\t, y - {5}\n",
            vowelA.Count,    vowelE.Count,    vowelI.Count,    vowelO.Count,    vowelU.Count,
vowelY.Count);
        Console.ReadKey();
    }
  }
}
```