Assignment 3:  
Create a custom string structure:  
    Create an ICustomString interface with the following custom functions:  
        A constructor that takes a plain old System.string to initialize the structure  
        string ToString()  
        void Insert(string stringToInsert)  
        void Remove(int startIndex, int numCharsToRemove)  
        int Length()

    Inherit from the ICustomString interface to implement the following custom string subclasses:  
        SystemString  
            Underlying structure: System.string  
            Piggyback off System.string's built-in functionality to implement ICustomString's functions  
        SystemArrayString  
            Underlying structure: System.array  
            Each index of the underlying array holds one character  
        SystemLinkedListString  
            Underlying structure: System.Collections.Generic.LinkedList  
            Each node of the underlying C# LinkedList holds one character  
        CustomLinkedListString  
            Underlying structure: your own custom linked list  
            Each node of the underlying custom linked list structure holds one character

Create a System.Collections.SortedList, SortedList<ICustomString> sortedStringList, sorted by the length of each string element, populated by a mix of each of the ICustomString subclasses

Using a Systems.Collections.Generic.Dictionary as an underlying structure, create a Sweepstakes class with the following functions (you will need to define a Contestant class containing appropriate fields for the purpose):  
    Sweepstakes(string name)  
    void RegisterContestant(Contestant contestant)  
    string PickWinner()  
    void PrintContestantInfo(Contestant contestant)

Create a sweepstakes management system:  
    Write an ISweepstakesManager interface with the following custom functions:  
        void InsertSweepstakes(Sweepstakes sweepstakes)  
        Sweepstakes GetNextSweepstakesWinner()  
    Inherit from the ISweepstakesManager interface to implement the following subclasses:  
        SweepstakesStackManager (using System.Collections.Generic.Stack)  
        SweepstakesQueueManager (using System.Collections.Generic.Queue)