**Title: Set Class**

**Description**: This project will be to complete a simple C# console application that implements a Set class. The Set will represent number from 1-100, inclusive. You will use an array of bools to keep track of Set members.

The project also contains a test driver to test your class.

The Set class contains the following public members. All of the methods have been implemented, except for those indicated. For your project you are to implement the remaining methods. When completed properly, your program output will look like the output provided below.

Constructor()

**TODO: Constructor(array[] bool)**

**TODO: Union(IntegerSet)**

**TODO: Intersection(IntegerSet)**

InsertElement(int)

DeleteElement(int)

IsEqualTo(IntegerSet)

ToString()

Clear()

When implementing the TODO methods, you must use the following constructs:

**foreach**

**exception handling**

**Correct Program Output:**

Demostrating IntegerSet Class

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Constructing Set 1

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IntegerSet Constructed

Constructing Set 2

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IntegerSet Constructed

Constructing Set 3 from bool[]

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IntegerSet Constructed

IntegerSet Constructed with bool[]

Demostrating Overwritten ToString()

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Contents of Set 3: 10, 20, 99, 100,

Demonstrating Insert()

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Inserting 5 into Set 1

Inserting 6 into Set 1

Inserting 6 into Set 2

Inserting 7 into Set 2

Set 1 = 5, 6,

set 2 = 6, 7,

Demonstrating Delete()

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Contents of Set 3: 10, 20, 99, 100,

Deleting element 100

Contents of Set 3: 10, 20, 99,

Demonstrating isEqual()

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Comparing Set 1 and Set 2

Comparison returned: False

Demonstrating Union()

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IntegerSet Constructed

s4 = Set 1 Union Set 2

Contents of Set 4: 5, 6, 7,

Demonstrating Intersection()

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IntegerSet Constructed

s5 = Set 1 Intersection Set 2

Contents of Set 5: 6,

Demonstrating Clear()

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Contents of Set 3: 10, 20, 99,

Clearing Set 3

Contents of Set 3:

Press any key to exit...