Indexer homework.

First examine the program 5-StingIntIndexer to see how to use an indexer with Two indexes.

Start a Visual Studio project. You are to code a class, MathFunctions, that has an indexer that has 2 indexes, an int and a string.

The indexer returns a float. Here is the Program.cs code you should use which will make use of the MathFunctions class you will write.

static void Main(string[] args)

{

    MathFunctions myMathObject = new MathFunctions();

    Console.WriteLine("enter an integer between 0 and 25");

    int inputValue = Convert.ToInt32(Console.ReadLine());

    if (inputValue < 26) // greater than 26 will blow up in factorial

    {

        Console.WriteLine();

        Console.Write("the square is: ");

        Console.WriteLine(myMathObject[inputValue, "Square"]);

        Console.WriteLine();

        Console.Write("the cube is: ");

        Console.WriteLine(myMathObject[inputValue, "Cube"]);

        Console.WriteLine();

        Console.Write("the factorial is: ");

        Console.WriteLine(myMathObject[inputValue, "Factorial"]);

    }

    else

    {

        Console.WriteLine("too big");

    }

    Console.WriteLine();

    Console.WriteLine("end of program");

    Console.ReadLine();

}

As you can infer, your indexer should expect to get 2 values, an integer between 0 and 25, and a string which will be one of Square, Cube, or Factorial. (You do not have to test for bad input.)

Based on which math function they specify, your code should perform that operation on the integer, and return that value as a float.

How do you calculate a Factorial? You “Bing” it!

<https://www.csharpstar.com/csharp-program-to-calculate-factorial/#:~:text=%20In%20this%20article%2C%20we%20will%20discuss%20different,number...%207%203.%20Using%20While%20loop%3A%20More%20>

Here is a screen shot of my program running. For my test run I used a 9. You should test with a 9 and make sure you get the same results.

