CS410 INTRODUCTION TO COMP SCI APPLIC

Assignment 12 – Number Methods

Problem

1. Download the Java program **NumberMethodsErrors.java** from Canvas and save it (right-click and choose Save Link As). Immediately save another copy as **NumberMethods.java**. and change the class name in the **public class** line.
THIS PROGRAM IS NOT COMPLETE AND CONTAINS ERRORS.

2. Correct and complete the methods and the **main** to produce the following:

```
Enter a positive integer...1001
Number of digits in the number is 4
Number begins with 1
Number ends with 1
Does number begin with 7? false
Does number begin with 3? false
Does number contain a 7? false
Does number contain a 3? false
Number of factors of the number is 6
Sum of digits in the number is 2
```

2. Follow the following rules:

- Assume that the input is a positive **int** with no leading zeroes.
- The input should be read in as a number - no String manipulation is allowed.
- The only Math method allowed is **Math.pow**
- Do not add any more methods
- You can call methods from within other methods

3. Fully check all methods as you complete them. Do not just use the example above.

Turning in the Assignment

1. When you have finished, run your program four times using the exact test data below

    Run 1: 770077081
    Run 2: 273
    Run 3: 94354
    Run 4: 10000

2. Take a screenshot (or two). Upload the screenshots and the **.java** and **.class** files to Canvas.

    Due Date: start of class on 4/14