A02 - Code modification CSIS-1400

Description:

Download the file A02.zip. There are two java files: A02.java and A02original.java. Both of these files are identical except for the class name. In this assignment you need to modify the examples provided, so that they will produce different output as described below. Make all the modifications in A02.java and keep A02original.java unchanged for your reference.

The main purpose of this assignment is to demonstrate your understanding of the existing code and your ability to implement specific changes. E.g. if the original code segment uses formatted output, use formatted output as well. If the original code segment uses a variable do the same.
Do **NOT** rewrite the code but make targeted modifications that keep the original intent of the code segment. However, make sure to update variable as needed. Variable names should always be descriptive.

This assignment is also about precision.

- Read the instructions carefully and pay attentions to details like punctuation, spaces, etc.
  Note that the output includes a single empty line between the examples. This should remain the same
- Make sure to add your name in the comment on top of the source code file
- Ensure proper indentation of your code
- Structure your code by adding single empty lines to group related statements

Example:

You are asked to change ExampleX so that it produces the following output: 2 + 5 = 10

ExampleX:

```
int num1 = 4
int num2 = 3
System.out.printf("%d * %d = %d",
        num1, num2, num1 * num2);
```

Good Solution:

```
int num1 = 2;
int num2 = 5;
System.out.printf("%d + %d = %d",
       num1, num2, num1 + num2);
```

Missing the point:

```
System.out.println("2 + 5 = 10");
```

Instructions:

Change example 0 so that it produces the following output:

```
Example 0:
   o
  / \
o o o
```

Change example 1 so that it produces the output below. Make sure that variable names are descriptive.

```
Example 1:
Michael swam 7 labs.
```

Change example 2 so that it produces the following output.

```
Example 2:
2 / 4 = 0
```

Change example 3 so that it produces the following output:

```
Example 3:
The perimeter of a square with side 7 is 28.
```

Change example 4 so that it produces the output below. This time the variable y should store a 4-digit number.

Notice: There is no space (no indentation) before the first printed number

Important: your code needs to provide the correct output even when a different 4-digit number is assigned to y (e.g. if y has the value 5432 then the first three digits need to be 5 4 3)

```
Example 4:
The value of y is 8642. The first 3 digits are:
6   4   2
```

Change example 5 so that it produces the following output:

```
Example 5:
21 is 3 times 7.
```

Hint1: there is no need to modify the branch that is not executed

Hint2: your code needs to provide correct output even if I change 21 to another multiple of 7 (e.g. 28 is 4 times 7)

Change example 6 so that it produces the output below provided the number of sides is 4.

```
Example 6:
*******
*     *
*******
```

Change example 7 so that it initializes the three numbers with 2, 4, and 6
and produces the output below.
Notice: the columns are of width 3 and right aligned.

```
Example 7:
Number   Square  Cube
  2        4       8
  4       16      64
  6       36     216
```

Turning in:

Make sure A02.java includes your name in the comment on top. **Zip up** both A02.java and A02original.java. Turn in the **zip file** via Canvas.