Lesson 1 Problem Set

Tim Magoun and Aravind Koneru

Compiled on Sunday 10th July, 2016 at 14:17

Do these problems for additional practice and challenge.

1. The modulus operator in Java is used to find the remainder of a division. This operator takes the form of % in Java with an example usage of `int remainder = dividend % divisor`. For example, $13\%5 = 3$.

    Use the knowledge learned in the first lesson, write the code in the given outline to simulate the modulus operator:

```java
public class Modulus {

        public static void main(String[] args) {
                int dividend = 52;
                int divisor = 10;
                int remainder = 0;

                //Write code here...




                //This should print out "2"
                System.out.println(remainder);
        }

}
```

2. **Challenge**: Create a variable that will round off decimal values to the nearest integer value. For example, if I input 10.5, it should round up to 11. Similarly, if the input is 10.3, it should round down to 10. Please do not use a built in java method to accomplish this task.

```java
public class Rounder{

        public static void main(String[] args){

                double value_to_round = 15.2;
                int rounded_value;

                //Insert Code Here....




                //Should print out 15
                System.out.println(rounded_value);


        }

}
```