CSE 174 – Fall 2021

Lab3: 10 points – Due Saturday, Sep 11, 2021 by 11:59pm

NOTE: Stop using jGRASP's F2, Shift-F2 to format code. It won't work because it always indents to 3 spaces. Use Tab or space key on the keyboard instead.

Counting Tires

Background:

The Wheel Deal produces cars and recently bought a bunch of pairs of tires (the tire company only ships them in packs of two). A total of 19,873,123 pairs were ordered for their new line of CyberCar which uses four tires.

Problem

Your job is to write a program named **CountTires** which displays:

- How many CyberCars will be produced by using those tires ordered.
- How many tires are left over at the end so we can request a refund from the tire supplier.
- Your program should generate the following output:

```
 ----jGRASP exec: java CountTires
The number of: 39746246 tires are added to the production line!
9936561 cars are produced.
2 tires are left.

 ----jGRASP: operation complete.
```

Tips

1. Always use **meaningful** variable names.
2. Save the total number of pairs (19873123) as **a constant variable**. That should be the only constant variable in your program.
3. Always pick the best variable **types** for the variables.
4. Instead of **manually** doing the **math**, have the **program** do the **math** for you!
    a. For Example: Given a number of pairs of tires (which is 19,873,123), have the program calculate the total number of tires.
5. You can **calculate** the results easily by using **/** and **%**.

Scoring Rubric:

- **Program produces correct output and follows style guidelines (5 points):** You will receive full credit for this if the autograder accepts your submission. Otherwise your score will be zero.
- **Program uses variables wisely (3 points):** Your code uses meaningful variable names, one constant variable, and your program uses the variables for the calculations rather than specified values.
- **Program has comments at the top and inside your code (2 Points):** Your code should have comments at the top with your name, also a few comments inside your code to explain necessary parts of your code.