CSCD 210
Math Lab

SPECIFICATIONS:

You have been assigned as the lead programmer for a downhill ski competition. The 2.5-kilometer downhill is one of the highlights of this competition and is considered by many to demonstrate the best skier. Your job is to take the top finish time (given in seconds with two digits of precision to the right of the decimal point) for the 2.5 kilometer downhill and do some conversions to find out how fast the person was traveling in:

- meters per second
- feet per second
- kilometers per hour
- miles per hour
- how long it would take the person to ski one mile
- how long it would take the person to ski 100 yards.

You must store your results in the following vars:

```
public class CSCD210MathLab {

    // Variables to store results
    public static double metersPerSecond;
    public static double feetPerSecond;
    public static double kilometersPerHour;
    public static double milesPerHour;
    public static double timeToSkiOneMileMinutes;
    public static double timeToSkiOneMileSeconds;
    public static double timeToSki100YardsSeconds;

    public static void main (final String [] args) {
```

NOTES:

- Your code and output file will reside in an outer folder named MathLab.
- Your java class will be in a folder called src.
- Your java class will be called CSCD210MathLab.
- It is your job to figure out the conversions necessary to determine the necessary output based on the above.
- You must first prompt for the skier's name, and then prompt for the time.
- It is also your job to format your output in the same style as shown below (2 decimal places).
    - You must only use DecimalFormat for formatting your output.
- The result of each conversion you perform will be displayed and clearly labeled, as demonstrated in the sample "run" below (NOTE: the actual numeric results are not displayed):

EXAMPLE:

```
Please enter the skier's name: Sally
Please enter the winning time of the race: 149.15

Sally was traveling at a rate of:
x.xx meters per second,
```

y.yy feet per second,
z.zz kilometers per hour,
y.yy miles per hour,

It would take m minutes and n.nn seconds for Sally to ski one mile.
It would take t.tt seconds for Sally to ski 100 yards.

TO TURN IN:

A zip file containing:

- Your java code
- Output capture named cscd210mathlabout.txt – containing at least 3 different runs

Name your zip file with your last name + first letter of your first name + mathlab.zip (ex: johnsonsmathlab.zip)