

INTRODUCTION TO JAVA FOR NON-C PROGRAMMERS

LABS

- 1 Write a program that creates two variables to hold the temperature in Fahrenheit and in Celsius. Initialize the Fahrenheit variable with 212 degrees. Determine the Celsius temperature by using the following formula:

$\text{Celsius} = (\text{Fahrenheit} - 32) \times 5 \div 9$

(Hint: Do the calculation in floating point and convert the result to an **int**.)

(Solution: *Fahrenheit.java*)

- 2 Write a program that stores numeric values for the total daily rainfall for one week (this will take 7 variables). Print the daily rainfall amounts and calculate and print the total rainfall for the week, as well as the average rainfall for the week.

(Solution: *Rain.java*)

- 3 Write a program that has two integer variables — say, **i** and **j**. Write the program to round off **i** to the next largest multiple of the other integer, **j**.

```
NextMultiple = i + j - i % j
```

Test your results with the following test data: round off 256 days to the next largest number of days that is evenly divisible by a 7-day week. With **i = 256** and **j = 7**, the next largest number of days divisible into 7-day weeks is 259.

(Solution: *NextMult.java*)