

MS-382
Program #2
Functions and
Temperature Conversion

Date Given: Monday, December 11, 2006

Date Due: Monday, January 10, 2007

The purpose of this assignment is to develop Java functions to perform routine calculations for a user's program. The program will need to convert temperatures between the Fahrenheit scale and the Celcius scale. You'll eventually need to write **three** functions for this program: main(), a function that converts Fahrenheit temperatures to celcius, and a function that converts Celcius temperatures to Fahrenheit. The formulas to convert temperatures are as follows:

$$(x^{\circ}C) \times \left(\frac{9^{\circ}F}{5^{\circ}C} \right) + 32 = y^{\circ}F$$

$$(y^{\circ}F - 32) \times \left(\frac{5^{\circ}C}{9^{\circ}F} \right) = x^{\circ}C$$

The following sample I/O behavior should be exhibited by your program:

```
Enter temp (ex. 70F or 23C): 212 F
212 degrees F = 100 degrees C
```

```
Enter temp (ex. 70F or 23C): 0 C
0 degrees C = 32 degrees F
```

```
Enter temp (ex. 70F or 23C): <ctrl>-C
<Program Terminates>
```