

## Program 13

Referring to the GRADEACTIVITY program in your notes, write the program to read in a Fahrenheit temperature and display the status (H, M, F, C). You are to complete this task by creating a class (.h) file that will consist of constructors that initializes and accepts the Fahrenheit value, a Mutator that will get the score and an Accessor that will return the value, declare a function that will be used to compute the status of the temperature entered.

Status

80 and above – H	Hot
60 and above – W	Warm
40 and above – F	Fair
Below 40 – C	Cold

**Note:** You will need a Temperature.h and Temperature.cpp file, along with the main .cpp file.

The output should look like this.

Today temperature is **80** degrees Fahrenheit.

The weather code is **H**.

## Program 14

Referring to the FINALEXAM class in your notes, use the class created for Fahrenheit, write a program with a class that creates a class that will inherit the Fahrenheit class. The program should allow a user to input a Celsius temperature and a floating-point humidity (ex: .80). Using the class and the inherited class, calculate the Fahrenheit temperature and based on the percentage of humidity, add or subtract the appropriate degree.

Output the Fahrenheit degree and the weather status as follows:

Today's temperature is **80** degrees Fahrenheit.

Today is a **hot** day.

If humidity is:

80 – 100 percent	add 5 degrees to Fahrenheit temperature,
60 – 79 percent	add 3 degrees to Fahrenheit temperature,
40 – 59 percent	add 1 degree to Fahrenheit temperature,
Below 40	subtract 1 from Fahrenheit temperature.