**Project 5: Regions**

In this Java programming assignment, you will practice using selection statements to determine what region of the United States a given state belongs in.

1. Design a class called **Regions** in a file called **Regions.java**. This class will hold the main method, and the class method that we will write in this assignment.
2. Write an empty **public static void main(String[] args)** method. This method should appear inside the curly braces of the Regions class.
3. Write one static class method (**getRegion**). The method **getRegion** should take one String argument and will return a String. The method should compare the input (a two-letter state abbreviation) to all possible U.S. state abbreviations in order to determine which region of the country the state belongs to. A list of these is given below. Several example method calls appear below.

**Regions.getRegion(“IN”); // returns “The state IN is in the Midwest region”**

**Regions.getRegion(“CA”); // returns “The state CA is in the Pacific region”**

**Regions.getRegion(“QA”); // returns “This is an invalid state abbreviation”**

1. Complete the definition for main. Your program should create a new **Scanner** object, prompt the user to type in a state by two-letter abbreviation, and then collect a String. The **main** method should then call the static method **getRegion** in order to determine which region the state belongs to. Make sure to check that the String contains a legitimate two-letter abbreviation.
2. Submit your **Regions.java** file on Blackboard.

For those students that feel confident and would like an extra challenge, add the following elements to your code before submitting.

1. Write a second method, **becameAState,** that takes a String argument as input and returns an integer. The integer should correspond to the year that the state joined the United States of America. Add a third method, **twinStates**, that takes a String argument and returns a String. The output should be a list of all other states that were introduced into the union in the same year as the given state. This should not include the input String.

Regions:

New England – ME, VT, NH, MA, CT, RI

Atlantic – NY, NJ, DE, MD, VA, NC, SC

Southeast – GA, FL, MS, AL, LA, TN

Midwest – PA, OH, MI, IN, IL, WI, MN, KY, WV, IA

Great Plains – ND, SD, KS, NE, MO

Mountain – CO, UT, MT, ID, WY

Southwest – AZ, NV, NM, TX, OK, AR

Pacific – WA, OR, CA, HI, AK

(NOTE: We claim no specific accuracy on placement of states in regions. If you choose to move states, make notes of these changes in a multi-line comment in your code.)