A2 Set 2

A. Create a Date class with three integer instance variables named day, month, year. It has a constructor with three parameters for initializing the instance variables, and it has one method named daysSinceJan1( ). It computes and returns the number of days since January 1 of the same year, including January 1 and the day in the Date object. For example, if day is a Date object with day = 1, month = 3, and year = 2000, then the call date.daysSinceJan1( ) should return 61 since there are 61 days between the dates of January 1, 2000, and March 1, 2000, including January 1 and March 1. Include a DateDemo class that tests the Date class. Don't forget leap years.

(3M)

B. What is the difference between automatic type conversion and type casting? What are the type promotion rules in Java expressions? (2M)