1. Rewrite each condition below in valid Java syntax (give a boolean expression):

a. x > y > z

b. x and y are both less than 0

c. neither x nor y is less than 0

d. x is equal to y but not equal to z

2. Suppose *gpa* is a variable containing the grade point average of a student. Suppose the goal of a program is to let a student know if he/she made the Dean’s list (the gpa must be 3.5 or above). Write an *if... else...* statement that prints out the appropriate message (either “Congratulations—you made the Dean’s List” or “Sorry you didn’t make the Dean’s List”).

3. File *Salary.java* contains most of a program that takes as input an employee’s salary and a rating of the employee’s performance and computes the raise for the employee. This is similar to Homework #2, except that the performance rating here is being entered as a String—the three possible ratings are “Excellent”, “Good”, and “Poor”. As in the pre-lab, an employee who is rated excellent will receive a 6% raise, one rated good will receive a 4% raise, and one rated poor will receive a 1.5% raise.

Add the *if... else...* statements to program Salary to make it run as described above. Note that you will have to use the *equals* method of the String class (not the relational operator ==) to compare two strings.

import java.util.Scanner;

import java.text.NumberFormat;

public class Salary

{

public static void main (String[] args)

{

double currentSalary; // employee's current salary

double raise; // amount of the raise

double newSalary; // new salary for the employee

String rating; // performance rating

Scanner scan = new Scanner(System.in);

System.out.print ("Enter the current salary: ");

currentSalary = scan.nextDouble();

System.out.print ("Enter the performance rating (Excellent, Good, or Poor): ");

rating = scan.nextLine();

// Compute the raise using if ...

newSalary = currentSalary + raise;

// Print the results

NumberFormat money = NumberFormat.getCurrencyInstance();

System.out.println();

System.out.println("Current Salary: " + money.format(currentSalary));

System.out.println("Amount of your raise: " + money.format(raise));

System.out.println( "Your new salary: " + money. format (newSalary) );

System.out.println();

}

}