Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ APCS A (Pre-Lab Exercises – 3.2)

1. Rewrite each condition below in valid Java syntax (give a boolean expression):
   1. x > y > z
   2. x and y are both less than 0
   3. neither x nor y is less than 0
   4. 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 the 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, try again next semester.”).

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1. Complete the following program to determine the raise and new salary for an employee by adding if ... else statements to compute the raise. The input to the program includes the current annual salary for the employee and a number indicating the performance rating (1=excellent, 2=good, and 3=poor). An employee with a rating of 1 will receive a 6% raise, an employee with a rating of 2 will receive a 4% raise, and one with a rating of 3 will receive a 1.5% raise.

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

// Salary.java

//

// Computes the amount of a raise and the new

// salary for an employee. The current salary

// and a performance rating (an int: 1 for "Excellent", 2 for

// "Good" or 3 for "Poor") are input.

// \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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

int 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 " +

"(1 for Excellent, 2 for Good, or 3 for Poor): ");

rating = scan.nextInt();

// Compute the raise using if ...

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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();

}

}