JAVA code for assignment program

Assignment 5:

The environmental lapse rate (0.0065) helps us determine what the temperature is at certain elevations (as you go higher, temperature decreases). The equations is: **change in temperature = change in altitude * 0.0065**

Your program should prompt the user for the current temperature at sea level, as well as a given elevation (ex: 5500 meters above sea level). The program will then determine the temperature at that elevation, using a formula that incorporates the lapse rate. The answer is below but DON'T LOOK!!!

```
package yourlastnameu2a5prog1;

import java.util.Scanner;      //imports the scanner component needed to read in input from the keyboard

//Created by: John Student
//Created for: Mr. Teacher
//Class: ICS 3C
//Filename: YourLastNameU2A5Prog1
//Date Started: Jan 29, 2011
//Date Finished: Jan 29, 2011
//This program prompts the user to enter the temperature at sea level as well as a given altitude.
//The program then calculates and outputs the temperature at the given altitude using the environmental lapse rate.

public class Main {

    public static void main(String[] args) {

        Scanner keyedInput = new Scanner(System.in);    //Scanner object used to receive input from the keyboard

        double seaLevelTemp;              //These variable will hold the indicated data through the running of the program
        double altitude;
        double changeInTemp;
        double newTemp;
        final double LAPSRATE = 0.0065;     //This constant holds the environmental lapse rate

        System.out.println ("**TEMPERATURE CALCULATOR**");      //program output header
        System.out.println ();

        System.out.println ("By entering the current temperature at sea level");
        System.out.println ("as well as a given altitude, a new temperature will be calculated.");   //Instructions for the user
        System.out.println ();

        System.out.print ("Enter the current temperature at sea level: ");  //prompts the user to enter the current temperature at sea level
        seaLevelTemp = keyedInput.nextDouble();                    //stores the users data into the seaLevelTemp variable
        System.out.println ();

        System.out.print ("Enter the altitude: ");                  //prompts the user to enter the altitude
        altitude = keyedInput.nextDouble();                        //stores the users data into the altitude
        System.out.println ();

        changeInTemp = altitude * LAPSRATE;                        //determines the change in temperature and stores it in changeInTemp
        newTemp = seaLevelTemp - changeInTemp;                     //determines the newTemp at altitude given by user

        System.out.println ("The temperature at " + altitude + " meters is " + newTemp + " degrees celsius.");  //outputs the new temperature
        System.out.println ();

        System.out.println ("**TEMPERATURE CALCULATOR**");           //program output footer

    }

}
```