MCS 260 Project One : Predicting the Temperature of Tomorrow due Friday 23 June at 10am

The goal of this project is to write a Python program to predict the temperature of tomorrow, given the temperature of today and the two previous days.
The program prompts the user for three numbers:

1. the temperature of today;
2. the temperature of yesterday; and
3. the temperature of the day before yesterday.

If we denote the temperature of today by T_0, the temperature of yesterday by T_{-1}, and the temperature of two days ago by T_{-2}, then the formula

$$3T_0 - 3T_{-1} + T_{-2} = T_1$$

gives T_1 to predict the temperature of tomorrow, using floating-point arithmetic.
On output, the program writes once sentence, in two lines:

1. the first line confirms the input;
2. the second line contains the predicted temperature.

The formula is evaluated with floats and all numbers are shown in fixed format, with one decimal after the dot.

If the program is saved in the file `predtemp.py`, then sessions in a terminal window (using the `$` as symbol for the prompt in the terminal) should go as follows:

```
$ python predtemp.py
Welcome to our Temperature Predictor!
Enter the temperature of today : 73
Enter the temperature of yesterday : 69.491
Enter the temperature of two days ago : 67
Given 73.0 of today, 69.5 and 67.0 of the two previous days,
the predicted temperature of tomorrow is 77.5.
$
```

Please observe the formatting of the numbers in the output sentence. The confirmation of an integer number ends with `.0` and numbers entered with more than one decimal after the dot are written with one decimal after the dot.

Some important points:

1. Do not submit programs that do not run. It is much better to submit an incomplete program that runs than a program that does not run.
2. You may assume that the users of your program are on their best behavior and enter numbers on input.
3. The layout of the dialogue with the user and the formatting of the results must be exactly as in the example above.
4. The first line of your Python program must be

   ```
   # MCS 260 Project One by <Author>
   ```

   where you replace the `<Author>` by your name.
5. Add documentation to clarify your choice of variables and to indicate the steps of the program.
6. The computer project must be solved *individually*. Collaborations are not allowed.
7. Upload your solution as a file with the `.py` extension into gradescope before 10am on Friday 23 June.
8. The late deadline is 5pm on Friday 23 June, but solutions that are submitted late are subject to a penalty of 10 points off.

If you have questions or difficulties with the project, please ask for help during office hours.