

CSCI 1301 – Project 1 – Solution

1 Grade Calculation

The following guideline was used to grade your work over 20:

	Points
You submitted something	+20
You did not submit using D2L	−2
It is not the right file (e.g., only the <code>sln</code> , or not a zip archive)	−19 or −5 if the source code is present
The archive does not have the right name (i.e., “ <code>lname_fname.zip</code> ”)	−2
The project does not have the right name (i.e., “ <code>Project01</code> ”)	−2
There are no delimited comments at the beginning with your name and the date (i.e., <code>/*...*/</code>)	−2
Your program does not compile	−15
The variable for your username has the wrong type or value.	−3
The first message is not properly displayed.	−3
You are not correctly reading the height of the user.	−3
Your conversion from centimeters to feet and inches is off.	−4
The second message is not properly displayed.	−3
You added meaningful comments to your code.	+1

Of course, I will use this table only as a guideline, and use my judgment to grade your work, but I believe it is useful for you to see where my expectations were.

2 Solution

Please, find a possible solution in this archive¹. The `Program.cs` file contains:

```
/*
 * Clement Aubert
 * 09/12/2020
 * CSCI 1301 -- Project 1
 */

using System;

class Program
{
    static void Main(string[] args)
    {
        /* Display the information about us: */
    }
}
```

¹http://spots.augusta.edu/caubert/teaching/2020/fall/csci1301/weekly/06/project/aubert_clement.zip

```

    string uName = "caubert";
    Console.WriteLine(uName + " would like to know your height in
↳ meters. Please enter it: ");

    /* Gather the information about the user :*/

    double heightIncm; // We use a double to store the height in
↳ centimeters given by the user.
    heightIncm = (double.Parse(Console.ReadLine())) * 100; // This line
↳ does a lot.
    // 1. We read as a string the value entered,
    // 2. We convert it to a double,
    // 3. We multiply it by 100, to obtain centimeters instead of meters,
    // 4. We assign the result to heightIncm.

    /* Conversion */

    double heightInin; // Variable to hold the height in inches

    /*
    * Conversion factor from cm to ft change with where you are!
    * https://en.wikipedia.org/wiki/Foot\_\(unit\)#US\_survey\_foot
    *
    * In Georgia, we use the U.S. Survey feet
    * https://www.ngs.noaa.gov/SPCS/images/spcs83\_legislation\_feet.png
    *
    * So,
    * 1 ft = 0.304800609601 m
    * 1 ft = 30.4800609601 cm
    *
    * But we will use another way of computing the height.
    * We will convert it to inches, using
    * 1 in = 2.54 cm
    * and then obtain the feet using
    * 1 ft = 12 in
    */

    heightInin = heightIncm / 2.54; // Store the height in inches of the
↳ user.
    // The rest of the computation, and the truncation, will take place
↳ at the next step.

    /* Displaying the result */
    Console.WriteLine(
        uName + " computed that your height is "
        + (int)(heightInin / 12) // Compute the number of feet, and
↳ truncate it.
        + " ft and "

```

```
        + (int)(heightInin % 12) // Compute the remainder of the previous
↪ operation, and truncate it.
        + " inches."
    );
}
}
```