**Programming – Output, Input, Variables, Data Types**

**Data Types, Casting and Final Make Exercise**

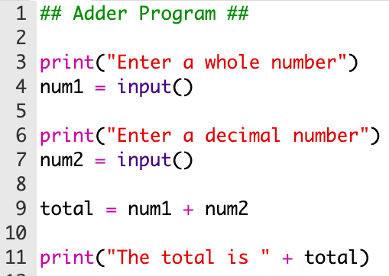
**Task 1 - Choosing Data Types**

What data type would you use to store each of the following values?

|  |  |
| --- | --- |
| **Value** | **Data Type** |
| Steve | String |
| 15 | Integer |
| 007 | String |
| B901LK | String |
| A | Char/String |
| 20.2 | Real/Float |
| True | Boolean |
| 1 | Integer |

**Task 2 – Fix the Casting**

Here is your starter code. [Click here to open it.](https://trinket.io/python3/1b6f911bfd)



This program gets two numbers as input, adds them together and outputs the total. But it doesn’t work. Use **casting** to fix the code so that:

1. **num1** is stored as an integer

2. **num2** is stored as a decimal

3. Line 11 does not produce a **type error.**

Paste the corrected code below:A screenshot of a computer program

Description automatically generated

**Task 3 – Make – Big Tipper**

Some friends are going for dinner at a restaurant and want to add a tip then share the cost evenly. They haven’t decided the tip yet, that depends on the service!

Write a program that:

1. Gets inputs for the total cost of the meal in pounds and pence, (e.g. 85.40), tip percentage (e.g. 10 or 20) and number of persons eating (e.g. 4).

2. Calculates the tip amount e.g. 10% or 20% and adds this percentage of the meal price to the total cost.

3. Calculates the cost per person.

4. Outputs the cost per person as part of a sentence.

Example output, for a meal costing £84.40, with 10% added as a tip, shared by 4 people:

***You will each pay £23.21***

Here is your starter file, it’s blank with just the same instructions from below.   
[Click here to open it.](https://trinket.io/python3/15880deb29) Paste your finished code below.

**Extensions:**

a) Make the program “verbose”: output a message for each stage of the process, i.e. output meal cost, output tip value, output total cost and then output cost per person.

b) After adding a tip, round up the total cost to the next £10 before splitting.

