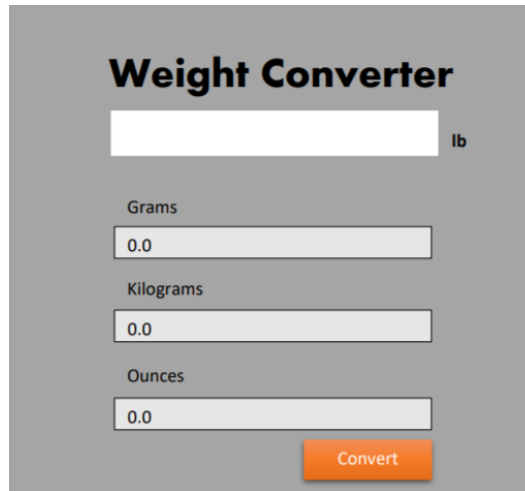


1. Requirement gathering and analysis

This task requires to create a weight convertor application with GUI. In this program user should be able to enter value in pound units and convert it to grams, kilograms and ounces.

The program GUI should look approximately like on this image:



2. Design

This program will be written as a Python script. To maintain a GUI, built-in tkinter library will be used.

3. Implementation or coding

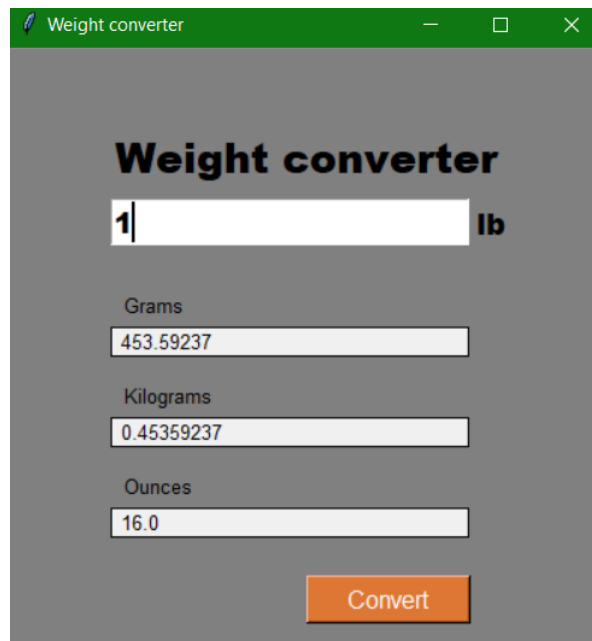
The code for this program is based on the Python tkinter library. The program is written using following steps:

1. Set up tkinter main window.
2. Place constant text labels on the window (title, weight units).
3. Create field for user input.
4. Create text labels that will show converted weights. They will update each time user presses the "Convert" button.
5. Create the "Convert" button, that will call a function convert().
6. Define the convert() function that will convert user's input in pounds to grams, kilograms and ounces and will update corresponding text labels.

4. Testing

Program was tested for different user inputs, including cases when user provides wrong input value (not a float number).

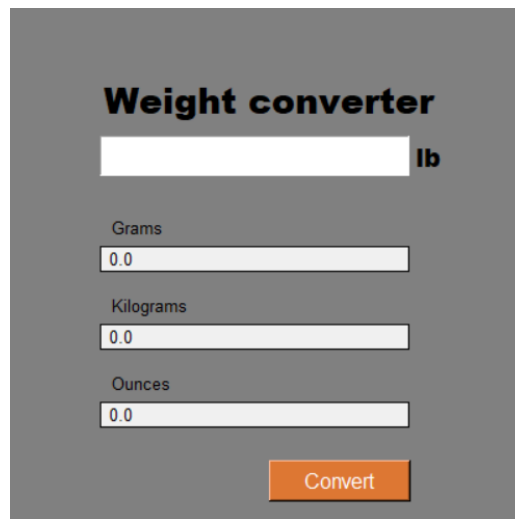
Results of testing are on images:



5. Deployment

Testing shown that program works as expected, so it is now in final version.

Final GUI design looks like this:

A screenshot of a web-based weight converter application. The interface has a dark gray background. At the top, the title "Weight converter" is displayed in a bold, black, sans-serif font. Below the title is a large white input field for the user's weight, followed by the unit "lb" in a bold black font. Underneath this, there are three rows of output fields. Each row consists of a unit label ("Grams", "Kilograms", and "Ounces" respectively) in a small gray font, followed by a white input field containing the value "0.0". At the bottom right of the interface is an orange rectangular button with the word "Convert" in white text.

Weight converter

lb

Grams

Kilograms

Ounces

Convert

6. Maintenance

Task is done and the weight converter program can be used for its purpose by users.