

### Software Development Process

1. Analyze the Problem:

This program is a weight converter that converts from pounds to grams, kilograms and ounces. So, conversion formulas will be needed to convert the number of pounds.

2. Determine Specifications:

The program will open in a window and display what the user needs to do, which is an entry box so the user can enter the number of pounds they wish to convert. Then the program will determine if the entry is a number or invalid input and prompt the user to input a number. Then the program will carry out the conversions and display it. There will be a button to convert and a button to close the window.

3. Create a Design

Input the number of pounds

Then calculate and convert pounds to grams, kilograms and ounces.

Output the conversions.

4. Implement the Design:

#Converter.py

(not copying the code to this pdf if its in the file uploaded)

(So I will just outline the design)

First, I had to create the basic window layout which included making the GUI more presentable.

Second, was creating the function that would convert the number of pounds

The screenshot shows a window titled "Converter" with a purple background. At the top, it says "Please enter a number". Below this, there are four rows of labels and input fields: "Pounds:" with a text box containing "12", "Grams:" with a text box containing "5431.1", "Kilograms:" with a text box containing "26.46", and "Ounces:" with a text box containing "192". At the bottom, there are two buttons: "Convert" and "Close".

Third, was to create a loop that would convert as long as the user click convert and also prompted them to input a real number if they had an invalid input. The loop also included the code for the close button so the user can

The screenshot shows the same "Converter" window, but now the "Pounds:" text box contains "12s". Above the text boxes, the text has changed to "Invalid input, Please enter a number". The other text boxes for "Grams:", "Kilograms:", and "Ounces:" still contain "5431.1", "26.46", and "192" respectively. The "Convert" and "Close" buttons are still at the bottom.

## 5. Test/Debug the Program

Need to continue debugging the close button issue. Not sure how to fix it.

## 6. Maintain the Program