

1. **Analyze the Problem:** Need to create a weight converter using GUI.

2. **Determine Specification:**

Input: A numeric value in pound (lb).

Process: Convert it into grams, kilograms, and ounces (oz)

Output: Values in grams, kg, and oz.

3. **Design: Instructions**

1. Import graphics by downloading graphics file and putting it into the same folder.
2. Create a window named Weight Converter.
3. Create an entry box for a pound value.
4. Create a button called “convert”.
5. Create an entry box for grams, kilograms and ounces.
6. Ask the user for an input and store it into lb box.
7. Convert it into grams and then kilograms and finally ounces.
8. Output the values in grams, kilograms and ounces.

4. **Implementation: Code**

'''

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HW Project 2

4.28.19

'''

```
from graphics import *

def main():

    win = GraphWin("Weight Converter", 500,500)

    win.setCoords(0.0,0.0,8.0,8.0)

    label = Text(Point(4,7.5), "Weight Converter")

    label.setSize(14)

    label.setStyle('bold')

    label.draw(win)

    rectangle = Entry(Point(4,7), 25)

    rectangle.setText("0.0")

    rectangle.setFill('white')

    rectangle.draw(win)

    label1 = Text(Point(6,7), "lb")

    label1.draw(win)


    rectangle4 = Rectangle(Point(6.5,.8), Point(7.5,1.2)).draw(win)

    rectangle4.setFill('orange')
```

```
button = Text(Point(7, 1.0), "Convert")
```

```
button.setTextColor('white')
```

```
button.draw(win)
```

```
label2= Text(Point(2.7,6.5),"Grams")
```

```
label2.draw(win)
```

```
rectangle1 = Entry(Point(4,6), 25)
```

```
rectangle1.setFill('white')
```

```
rectangle1.setText("0.0")
```

```
rectangle1.draw(win)
```

```
win.getMouse()
```

```
label3 = Text(Point(2.7,5.5), " Kilograms")
```

```
label3.draw(win)
```

```
rectangle2 = Entry(Point(4,5),25)
```

```
rectangle2.setFill('white')
```

```
rectangle2.setText("0.0")
```

```
rectangle2.draw(win)
```

```
label4 = Text(Point(2.7, 4.5), "Ounce")
```

```
label4.draw(win)
```

```
rectangle3 = Entry(Point(4,4), 25)
```

```
rectangle3.setFill('white')
```

```
rectangle3.setText("0.0")
```

```
rectangle3.draw(win)
```

```
lb = eval(rectangle.getText())
```

```
grams = lb*453.59
```

```
rectangle1.setText(grams)
```

```
win.getMouse()
```

```
lb1 = eval(rectangle1.getText())
```

```
kg = lb1/1000
```

```
rectangle2.setText(kg)
```

```
win.getMouse()
```

```
lb2 = eval(rectangle2.getText())
```

```
oz = lb2*35.274
```

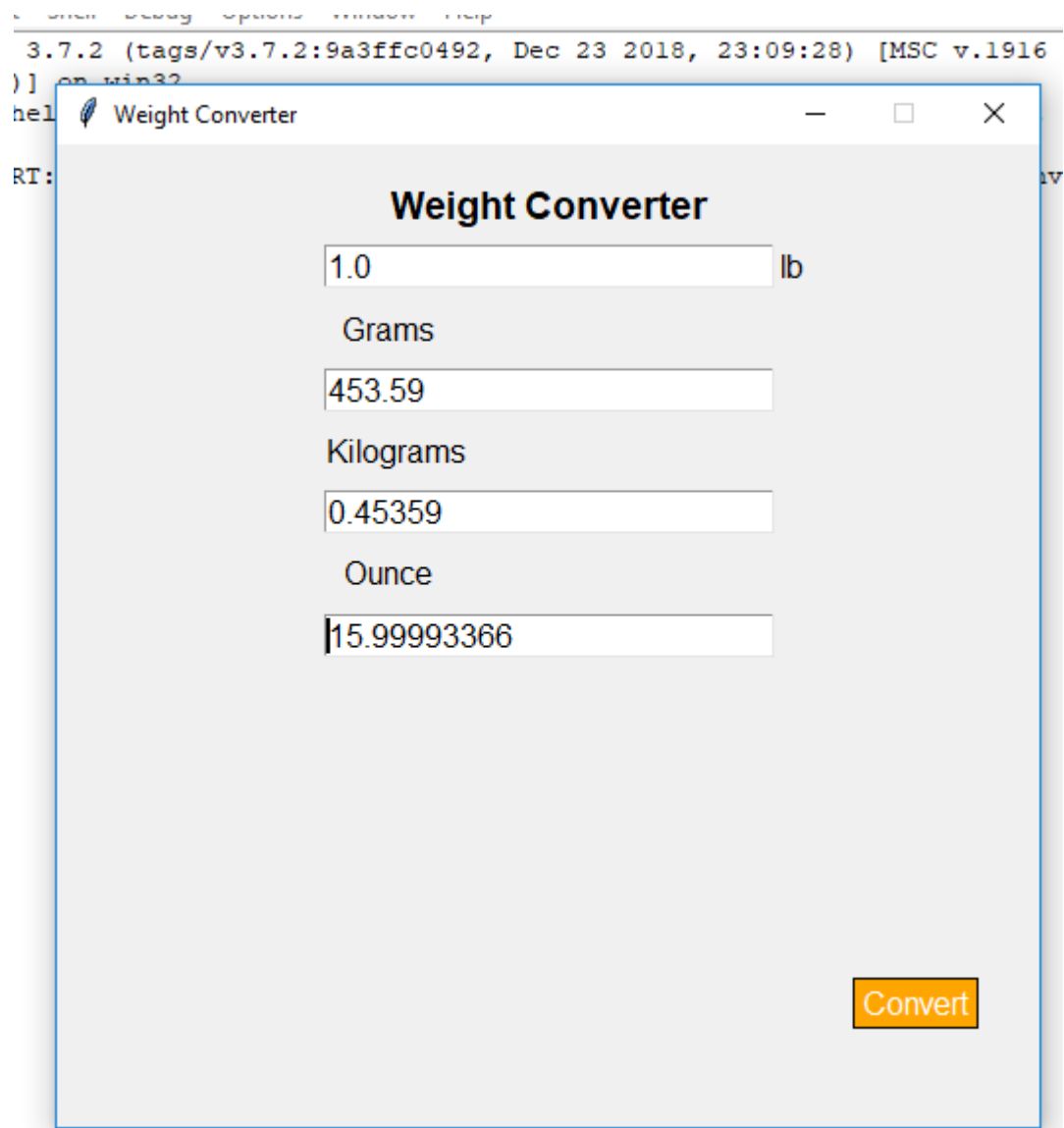
```
rectangle3.setText(oz)
```

```
win.getMouse()
```

```
win.close()
```

```
main()
```

Output:



5. **Testing and Debugging:** The program works but has a concern with while loop.
6. **Maintenance:** While loop needs to be created in the case where the user input anything but a number.