# **Conversion Challenge**

# The Challenge:

Implement a utility class/prototype with a Fluent Interface, which can perform conversions between various units of measurement. The class/prototype can be implemented in a programming language of your choice.

### Rules

- All conversions should be rounded to 2 decimal places.
- Invalid conversions, such as converting a length to a weight, must throw an exception
- Only the following conversions need to be supported:

From / To	Conversion
Pounds (lb) / Kilograms (kg)	2.2lb = 1kg
Pounds (lb) / Ounces (oz)	1lb = 16oz
Feet (ft) / Inches (in)	1ft = 12in
Feet (ft) / Meters (m)	1ft = 0.3m
Pint (pt) / Fluid Ounces (fl oz)	1pt = 16fl oz

# **Example Usage**

```
// JavaScript
var kilograms = new Conversion()
    .convert(16, "lb")
    .to("kg")
    .execute();
// kilograms should now equal 7.27 (based on conversion table)

// Java
double pints = new Conversion()
    .convert(1200, "fl oz")
    .to("pt")
    .execute();
// pints should now equal 75
```

# Notes/Hints:

- You're free to choose the names of classes, methods, parameters, etc. as you see fit. The code samples above are examples only.
- https://en.wikipedia.org/wiki/Fluent\_interface
- Take note of any assumptions you make while designing your solution
- Exact conversion ratios are unimportant. 16lbs is closer to 7.26kg in practice but for the purposes of this exercise, the conversion values provided are close enough.
- Your final solution should be submitted as a single text file with a .txt extension or provided via a link to an online editor such as <a href="https://jsfiddle.net/">https://jsfiddle.net/</a>