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|  | Abstract Conversion |  |
| - | double value | Assuming that this class only need double input since Overloaded operator already converted fractions to double |
|  | **Constructor** |  |
| + | Conversion() |  |
| + | Conversion(double value) | If value < 0 exception?? |
|  | **Methods** |  |
| + | setValue(double value) : void |  |
| + | getValue() : double |  |
| + | virtual convertToFraction(double value) : string | Will be needed to converted into fractions again after conversion of metric and imperial |
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|  | Metric : public Conversion |  |
|  | **Constructors** |  |
| + | Metric() |  |
| + | Metric(double v) | Initialize value from Conversion |
|  | **Methods** |  |
| + | ounceToMilligrams(double ounce) : double | If < 0 use exception |
| + | ounceToGrams(double ounce) : double | ^same |
| + | poundsToKilograms(double pounds) : double | ^same |
| + | inchToMillimeters(double inch) : double | ^same |
| + | inchToCentimeters(double inch) : double | ^ same |
| + | inchToMeters(double inch) : double | ^ |
| + | feetToMeters(double feet) : double | ^ |
| + | yardsToMeters(double yards) : double | ^ |
| + | yardsToKilometers(double yards) : double | ^ |
| + | milesToKilometers(double miles) : double | ^ |
| + | Virtual convertToFraction(double v) : string | After imperial converted to metric, turn it to fraction (scaled format) |

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|  | Imperial : public Conversion |  |
|  | **Constructors** |  |
| + | Imperial() |  |
| + | Imperial(double v) | Initialize value from converison |
|  | **Methods** |  |
| + | milligramsToOunce(double milligrams) : double | If < 0 use exception |
| + | gramsToOunce(double grams) | ^ |
| + | kilogramsToPounds(double kilograms) | ^ |
| + | millimetersToInch(double millimeters) | ^ |
| + | centimetersToInch(double centimeters) | ^ |
| + | metersToInch(double meters) | ^ |
| + | metersToFeet(double meters) | ^ |
| + | metersToYard(double meters) | ^ |
| + | kilometersToYards(double kilometers) | ^ |
| + | kilomtersToMiles(double kilometers) | ^ |
| + | convertToFraction(double v) : string | After metric converted to imperial, turn it to fraction (scaled format) |