

Selftest

The presentation somewhat glances over the need to have a currency class. Create a class that allows you to present and calculate with a currency amount. For example, you should be able to add, subtract, and obtain a multiple or a fraction of the currency. Here is a start.

```
class Currency:
    """ allows calculations with a currency where the main unit
        is divided into hundredths. """
    symbol = 'US$'
    def __init__(self, dollars, cents):
        if dollars >= 0:
            self.value = dollars*100+cents
        else:
            self.value = dollars*100-cents
    def __str__(self):
        if self.value > 0:
            return "{:s}{:d}.{:02d}".format(
                Currency.symbol, self.value//100,
                self.value%100)
        else:
            val = -self.value
            return "-{:s}{:d}.{:02d}".format(Currency.symbol, val//100,
                val%100)
```

Implement dunder methods for equality and for lesser than. Implement a function

```
def __rmul__(self, factor):
```

that allows us to multiply a floating point number with a currency. The result is rounded to the nearest cent.

Also, implement a class method "change_symbol" that changes the symbol in Currency. As you can see, by default, the symbol is 'US\$'.