

# Intro to Python

## Homework 6

### Problem 1

Write a test program that accepts three sides for a triangle as user input and computes the area if the input is valid. Otherwise, it displays that the input is invalid.

```
# Returns true if the sum of any two sides is greater than the third side.
```

```
def isValid(side1, side2, side3):
```

```
# Returns the area of the triangle.
```

```
def area(side1, side2, side3):
```

### Problem 2

Write a program that prompts the user to enter three numbers and invokes the following function to display them in increasing order.

```
def displaySortedNumbers(num1, num2, num3):
```

### Problem 3

Write a program that converts an amount of money from one currency to another. You should construct 2 methods:

```
def amountPerDollar(currency):
```

```
# this method takes in a string equal to either "usd" (US Dollar), "eur" (Euro), "jpy" (Japanese Yen), "chf" (Swiss Franc), "cny" (Chinese Yuan), or "inr" (Indian Rupee) and
```

returns a floating point for the conversion factor per dollar (e.g.  
amountPerDollar("eur")=0.85; Google the other values).

```
def converter(amount, currency1, currency2):
```

```
# this method takes in a floating point amount, a string initial currency, and a string  
target currency. Call amountPerDollar on currency1 and currency2 and use the  
conversion factors to convert amount from the initial currency to the target.
```