```
# stats.py
def get_scores():
    """Get scores interactively from the user
    post: returns a list of numbers obtained from user"""
def min_value(nums):
   """ find the minimum
   pre: nums is a list of numbers and len(nums) > 0
    post: returns smallest number in nums"""
def max_value(nums):
    """ find the maximum
   pre: nums is a list of numbers and len(nums) > 0
    post: returns largest number in nums"""
def average(nums):
    """ calculate the mean
    pre: nums is a list of numbers and len(nums) > 0
    post: returns the mean (a float) of the values in nums"""
def std_deviation(nums):
    """calculate the standard deviation
    pre: nums is a list of numbers and len(nums) > 1
    post: returns the standard deviation (a float) of the values
          in nums"""
```

With the specification of these functions in hand, you and your friend should easily be able to divvy up the functions and complete the program in no time. Let's implement one of the functions just to see how it might look. Here's an implementation of std_deviation.

```
def std_deviation(nums):
    xbar = average(nums)
    sum = 0.0
    for num in nums:
        sum += (xbar - num)**2
    return math.sqrt(sum / (len(nums) - 1))
```

Notice how this code relies on the average function. Since we have that function specified, we can go ahead and use it here with confidence, thus avoiding duplication