6.33

Write a program that simulates coin tossing. For each toss of the coin, the program should print *Heads* or *Tails*. Let the program toss the coin 100 times and count the number of times each side of the coin appears. Print the results. The program should call a separate function *flip* that takes no arguments and returns 0 for tails and 1 for heads. [Note: If the program realistically simulates the coin tossing, then each coin should appear approximately half the time.]

6.41

The greatest common divisor of integers x and y is the largest integer that evenly divides both x and y. Write a recursive function *gcd* that returns the greatest common divisor of x and y, defined recursively as follows: If y is equal to 0, then gcd(x, y) is x; otherwise, gcd(x, y) is gcd(y, x%y), where % is the remainder operator. [Note: For this algorithm, x must be larger than y.]

6.51

Write a program that uses a function template called *minimum* to determine the smaller of two arguments. Test the program using integer, character and floating-point number arugments.