Chapter 11: Methods - Exercises

Exercise 11 - 01: Summing the digits in an integer

Write a method that computes the sum of the digits in an integer. Use the following method header:
public static int sumDigits(long n)
For example, sumDigits(234) returns 2 + 3 + 4 = 9.

Hint: Use the % operator to extract digits, and the / operator to remove the extracted digit. For instance, to extract 4 from 234, use 234 % 10 (=4). To remove 4 from 234, use 234 / 10 (= 23) Use a loop to repeatedly extract and remove the digit until all the digits are extracted.

Exercise 11 - 02: Returning an integer reversed

Write the following method to return an integer reversed:
public static int reverse(int number)
For example, reverse(3456) returns 6543.

Exercise 11 - 03: Computing GCD

Write a method that returns the greatest common divisor between two positive integers, using the following header:
public static int gcd(int m, int n)
Write a test program that computes gcd(24, 16) and gcd(255, 25).