```java
/**
 * Computes the remainder of the Euclidean devision of a by b. In contrast to
 * the Java version a % b, the output will always be positive. Throws
 * ArithmeticException when b is equal to 0.
 *
 * (The goal of this example is not to create an efficient implementation, but
 * to illustrate coverage.)
 *
 * @param a dividend
 * @param b divisor != 0
 * @return remainder r with 0 <= r < b
 */
public static int modulo(int a, int b) {
    if (b < 0) {                // 1
        b *= -1;                // 2
    }
    int m = a;                  // 3
    while (m < 0 || m > b) {    // 4
        m += m < 0 ? b : -b;    // 5
    }
    return m;                   // 6
}
```