Assignment 1

- Create a method that counts (use multiple threads) a number of primes in a given range
  - int countPrimes(long start, long stop)
Assignment 2

- define the Matrix and Vector classes to represent a matrix and vector
  - the type of matrix/vector entries is double

- create the methods
  - `Vector multiply(Matrix m, Vector v)`
  - `Vector multiply(Matrix m, Vector v)`

  - implement parallel multiplication
  - in a case of bad size of matrix/vector, the method throws an exception
Tests...
Test 1

- Is it possible to declare the variable `i` so that the following cycle never terminates?

```java
while (i != i + 0) {
    
}
```

The example based on code from *J. Bloch, N. Gafter: Java Puzzlers*
• Is is possible to declare the variables \( i \) and \( j \) so that the following cycle never terminates?

```java
while (i <= j && j <= i && i != j) {
}
```