

Prime Number Coding Exercise

Overview

Your task is to use test driven development to implement a prime number generator that returns an ordered list of all prime numbers in a given range (inclusive of the endpoints).

You should also develop a small main program to drive your generator and to allow the user to specify the prime number range via the command line.

To successfully complete the exercise, **all unit tests must pass as well as provide 100% code coverage.**

You must implement the interface specified below. You may also create any other methods, interfaces and/or classes that you deem necessary to complete the project.

Interface

```
Interface PrimeNumberGenerator {  
    List<Integer> generate(int startingValue, int endingValue);  
    boolean isPrime(int value);  
}
```

Additional Information

- The code should handle inverse ranges such that 1-10 and 10-1 are equivalent.
- Ensure that you run a test against the range 7900 and 7920 (valid primes are 7901, 7907, 7919).
- Candidates are welcome to pick any language you are comfortable in, but reviewers would prefer java or kotlin
- A graphical UI is not required for this challenge (command line instructions will suffice but candidates are welcome to create a nicer UI)

Definition:

In mathematics, a prime number (or a prime) is a natural number which has exactly two distinct natural number divisors: 1 and itself. The first twenty-six prime numbers are: 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, 67, 71, 73, 79, 83, 89, 97, 101