

< Object Oriented Programming - Assignments #2>

1. Prime numbers. Write a program that prompts the user for an integer and then prints out all prime numbers up to that integer. For example, when the user enters the random variable within 100. For example, the program should print entering 20

2 3 5 7 11 13 17 19

- Recall that a number is a prime number if it is not divisible by any number except 1 and itself.
- Use a class **PrimeGenerator** with methods *nextPrime* and *isPrime*. Supply a class **PrimePrinter** whose main method reads a user input, constructs a Prime Generator object, and prints the primes.

[Score Criteria]

- Comments in javadoc format for all classes and methods [1pt]
- Implementing the appropriate *nextPrime* method [1pt]
- Implementing the appropriate *isPrime* method [1pt]
- Providing **PrimePrinter** class with the appropriate constructor[1pt]
- Providing **PrimeGenerator** class [1pt]
- Providing the appropriate output results and documentation (submission with external report combining all the sourcecode) [1pt]
- Code accuracy with the various input cases [1pt]

[Example Prompt]

```
Enter upper limit: 20
2 3 5 7 11 13 17 19
```