Lab 3: if statements and loops

Setup

Merge your lab repository as described in Lab2.pdf.
You should see the lab3 folder and GuessNumber.java inside this folder after the merge operation.

Exercise 1: Modify the GuessNumber to show the result

Example output is shown for both succeful and unsuccesful guesses.
If user succesfully guess the number.

```
Hi! I'm thinking of a number between 0 and 99.
Can you guess it: 77
Congratulations!
```

If guess does not matches the number

```
Hi! I'm thinking of a number between 0 and 99.
Can you guess it: 45
Sorry, the number was 44
```

Exercise 2: Modify the GuessNumber to allow multiple guess

User will be able to guess until he/she finds the number or quit from the game by typing -1. Example output is shown for both succeful guess and quit after a few attempts.

If user succesfully after a few attempts

```
Hi! I'm thinking of a number between 0 and 99.
Can you guess it: 34
Sorry!
Type -1 to quit or guess another: 56
Sorry!
Type -1 to quit or guess another: 79
Sorry!
Type -1 to quit or guess another: 48
Congratulations!
```

If user quits after a few attempts

```
Hi! I'm thinking of a number between 0 and 99.
Can you guess it: 70
Sorry!
Type -1 to quit or guess another: 55
Sorry!
Type -1 to quit or guess another: 24
Sorry!
Type -1 to quit or guess another: -1
Sorry, the number was 64
```

Exercise 3: Modify the GuessNumber to give hint after each attempt

Not to have more fun, we will inform user whether his/her guess is less than or greater than the target number. Example output is shown below.

```
Hi! I'm thinking of a number between 0 and 99.
Can you guess it: 50
```

```
Sorry!
Mine ise greater than your guess.
Type -1 to quit or guess another: 75
Sorry!
Mine ise greater than your guess.
Type -1 to quit or guess another: 87
Sorry!
Mine ise less than your guess.
Type -1 to quit or guess another: 81
Sorry!
Mine ise less than your guess.
Type -1 to quit or guess another: 78
Sorry!
Mine ise greater than your guess.
Type -1 to quit or guess another: 80
Sorry!
Mine ise less than your guess.
Type -1 to quit or guess another: 79
Congratulations!
```

Exercise 4: Modify the GuessNumber to print number of attempts

```
Hi! I'm thinking of a number between 0 and 99.
Can you guess it: 50
Sorry!
Mine ise less than your guess.
Type -1 to quit or guess another: 25
Sorry!
Mine ise less than your guess.
Type -1 to quit or guess another: 12
Sorry!
Mine ise greater than your guess.
Type -1 to quit or guess another: 18
Sorry!
Mine ise less than your guess.
Type -1 to quit or guess another: 15
Congratulations! You won after 4 attempts!
```

Exercise 5 : Find Prime Numbers

Description: Your program will accept a number as an argument such as shown below and print the prime numbers up to the given number.

```
    Your code will be executed as follows: (Second line is the expected ooutput):
    > java FindPrimes 50
    > 2,3,5,7,11,13,17,19,23,29,31,37,41,43,47
```

Open Lab3_AlgorithmDevelopment.pdf. Have a look at the slides. They describe how to write a pseudo code for a problem before starting coding.

Create a class called `FindPrimes` in the "lab3" directory..

Implement the main method of the `FindPrimes` to print the prime numbers as described above.

Compile and run `FindPrimes` class

NOTE: In order to get a grade for this lab

Your Bitbucket account name should have the format described in lab1.pdf

Your repository name should be lab

Your files should be in a folder named "lab3" in the repository

Your files should be compiled successfuly

You should complete all the steps in the exercises
Your files should be submitted to Bitbucket.
You have to add commit and push files as described in lab1.pdf and lab2.pdf