**Pair Programming Logic Lab 3**

**In the following exercise, you will be using JS to solve logical problems in pairs.**

* For each of the following problems, create a file “problemXX.js”
* At the end, compress all the files in 1 folder named “Name1Name2Lab3”

**Problem 1:🔑x5**

Write a function that returns all the numbers from 1 to 100 (in a list)

**Problem 2:🔑x5**

Write a function that returns all the even numbers from 1 to 100 (in a list)

**Problem 3:🔑x5**

Write a function that takes 2 numbers and returns the sum of all odd numbers between them

**Sample Input** **Sample Output**

1 5 9

2 7 15

**Problem 4:🔑x5**

Write a function that takes a number and returns a boolean on whether or not it is armstrong

**Sample Input** **Sample Output**

153 Armstrong

**Problem 5:🔑x5**

Write a function that takes a number and returns a boolean on whether or not it is perfect

**Sample Input** **Sample Output**

6 Perfect

**Problem 6:🔑x5**

Write a function that takes a number and returns its binary value

**Sample Input** **Sample Output**

4 100

**Problem 7:🔑x5**

Write a function that takes a number and returns a boolean on whether or not it is prime

**Sample Input** **Sample Output**

10 Not Prime

7 Prime

**Problem 8:🔑x5**

Write a function that takes 2 numbers and generates a random number between them.

Write a function that takes 2 numbers and returns a boolean on whether or not they are equal.

Write a function that uses the previously created functions in order to allow the user up to 5 guesses to know the random number (consider ranges to be 1 and 30).

**Sample Input** **Sample Output**

Enter your guess: 10 Wrong!

Enter your guess: 20 Wrong!

Enter your guess: 25 Right!

**Problem 9:🔑x5**

Write a function that takes a number and returns its fibonacci number starting from index 0

**Sample Input** **Sample Output**

9 34