Experiment with the code below changing the value of number and adding more print statements with boolean expressions to determine if the numbers 5, 6, and 7 are prime. Are all odd numbers prime? Are all even numbers not prime?

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Pair?

```
1 //Code by Akshat Garg
 2 public class PrimeNumbers
 3 {
 4
      public static void main(String[] args)
 5
      {
 6
          int number = 5;
 7
          System.out.println("A prime number is only divisible by 1 and itself.");
 8
          System.out.println("Is " + number + " divisible by 1 up to " + number + "?");
          System.out.println("Divisible by 1?" + (number % 1 == 0));
 9
10
          System.out.println("Divisible by 2? " + (number % 2 == 0));
          System.out.println("Divisible by 3? " + (number % 3 == 0));
11
          System.out.println("Divisible by 4?" + (number % 4 == 0));
12
13
          System.out.println("Divisible by 5? " + (number % 5 == 0));
14
          System.out.println("Divisible by 6?" + (number % 6 == 0));
          System.out.println("Divisible by 7?" + (number % 7 == 0));
15
          System.out.println("Divisible by 8?" + (number % 8 == 0));
16
17
18
      }
19 }
20
21
```

```
A prime number is only divisible by 1 and itself.

Is 5 divisible by 1 up to 5?

Divisible by 1? true

Divisible by 2? false

Divisible by 3? false

Divisible by 4? false

Divisible by 5? true

Divisible by 6? false

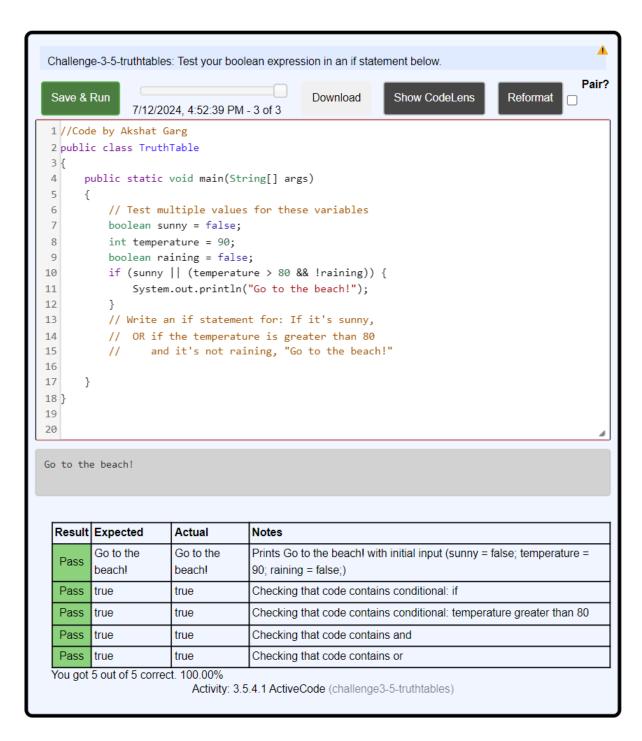
Divisible by 7? false

Divisible by 8? false
```

Result	Expected	Actual	Notes
Pass	true	true	Checking that code contains boolean check for divisibility by 6
Pass	true	true	Checking that code contains boolean check for divisibility by 7
Pass	true	true	Checking that code has been changed

You got 3 out of 3 correct. 100.00%

Activity: 3.1.4.1 ActiveCode (challenge3-1-primeNumbers)



Fun small activities, works well in understanding the order of logical operations with parentheses and conditional statement outputs.