Assignment Conditional and Looping Statements

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1. Write a Java program to display Fibonacci primes.

   Program:

```
import java.util.Scanner;

public class fprime {

    public static void main(String args[]) {

        Scanner ulimit = new Scanner(System.in);

        System.out.println("\nEnter upper limit:");
        int limit = ulimit.nextInt();

        System.out.println("\nFibonacci primes:");

        int m = 0; int n = 1; int fibonacci = m + n;

        while (fibonacci <= limit) {

            int count = 0;

            for (int i = 1; i <= Math.sqrt(fibonacci); i++) {

                if (fibonacci != 1 && fibonacci%i == 0) {
                    count += 1;
                }
            }

            if (count == 1) {
                System.out.println(fibonacci);
            }

            m = n; n = fibonacci;
            fibonacci = m + n;
        }
    }
}
```

   Output:

```
Enter upper limit:
1000000000

Fibonacci primes:
2
3
5
13
89
233
1597
28657
514229
433494437
```

2. Write a Java program to get ‘n’ numbers from user and display the a) Minimum value, b) Maximum value, c) Mean of all the entered values.

Program:

```
import java.util.Scanner;

public class value {

    public static void main(String args[]) {

        Scanner nterm = new Scanner(System.in);
        Scanner intgr = new Scanner(System.in);

        System.out.println("\nEnter the number of terms:");
        int terms = nterm.nextInt();

        int min = 0; int max = 0; int sum = 0;

        for (int n = 1; n <= terms; n++) {

            System.out.println("Enter term "+ n +" value:");
            int value = intgr.nextInt();

            if (value < min) {
                min = value;
            }

            if (value > max) {
                max = value;
            }

            sum += value;
        }

        System.out.println("\nObservations based on entered integers:");
        System.out.println("Minimum: "+ min);
        System.out.println("Maximum: "+ max);
        System.out.println("Mean: "+ (float) sum/terms);
    }
}
```

Output:

```
Enter the number of terms:
5
Enter term 1 value:
14
Enter term 2 value:
-17
Enter term 3 value:
35
Enter term 4 value:
89
Enter term 5 value:
48

Observations based on entered integers:
Minimum: -17
Maximum: 89
Mean: 33.8
```