

Mahdi Khaliki

<https://bitbucket.org/mkhaliki/assignment-4-e7.5-and-p6.5/src/master/>

Instructions to run:

PrimeGenerator.java must be in same project as P6_5.java

Assignment 4

src

E7_5

E7_5.java

P6_5.java

PrimeGenerator.java

```
1  import java.util.Scanner;
2
3  public class E7_5 {
4      public static void main(String[] args) {
5          Scanner in = new Scanner(System.in);
6          System.out.println("Enter a string of integers: ");
7          String entries = in.nextLine();
8
9          if (entries.length() == 0) System.exit(status: 0);          // If user does not enter a number, exit program
10
11         String numbers[] = entries.split(regex: "");
12         int alternating_sum = Integer.parseInt(numbers[0]);
13         System.out.print(alternating_sum);
14
15         for (int i = 1; i < numbers.length; i++) {
16             if (i % 2 == 0) {
17                 System.out.print(" + ");
18                 alternating_sum += Integer.parseInt(numbers[i]);
19             }
20             else {
21                 System.out.print(" - ");
22                 alternating_sum -= Integer.parseInt(numbers[i]);
23             }
24             System.out.print(numbers[i]);
25         }
26         System.out.println(" = " + alternating_sum);
27     }
28 }
```

E7_5

main()

Run: E7_5

/Library/Java/JavaVirtualMachines/jdk1.8.0_91.jdk/Contents/Home/bin/java ... <1 internal call>

Enter a string of integers:

1 4 9 16 9 7 4 9 11

1 - 4 + 9 - 16 + 9 - 7 + 4 - 9 + 11 = -2

Process finished with exit code 0

4: Run

6: TODO

Terminal

Event Log

All files are up-to-date (moments ago)

8:1 LF UTF-8 4 spaces

```
1 import java.util.Scanner;
2
3 public class P6_5 {
4     public static void main(String[] args) {
5         Scanner in = new Scanner(System.in);
6         System.out.println("Enter an integer: ");
7         int integerInput = in.nextInt();
8
9         PrimeGenerator prime = new PrimeGenerator(integerInput);
10        int output = prime.nextPrime();
11        while (output != 0) {
12            System.out.print(output + " ");
13            output = prime.nextPrime();
14        }
15    }
16 }
```

P6_5

Run: P6_5

/Library/Java/JavaVirtualMachines/jdk1.8.0_91.jdk/Contents/Home/bin/java ... <1 internal call>

Enter an integer:

20

2 3 5 7 11 13 17 19

Process finished with exit code 0