10/10/23, 11:23 PM Roman integer

```
import java.util.*;
1
2
3
     public class RomanToInteger {
         public static void main(String[] args) {
4
5
             Scanner scanner = new Scanner(System.in);
             System.out.print("Enter a Roman numeral: ");
6
             String romanNumeral = scanner.nextLine();
8
             int decimalValue = convertToInteger(romanNumeral);
             System.out.println("Decimal value: " + decimalValue);
9
             scanner.close();
10
11
12
13
        public static int convertToInteger(String romanNumeral) {
             Map<Character, Integer> romanMap = new HashMap♦();
14
             romanMap.put('I', 1);
15
             romanMap.put('V', 5);
16
17
             romanMap.put('X', 10);
18
             romanMap.put('L', 50);
             romanMap.put('C', 100);
19
             romanMap.put('D', 500);
20
             romanMap.put('M', 1000);
21
22
23
             int decimalValue = 0;
24
             int previousValue = 0;
25
26
             for (int i = romanNumeral.length() - 1; i \ge 0; i--) {
27
                 char currentChar = romanNumeral.charAt(i);
28
                 int currentValue = romanMap.get(currentChar);
                 if (currentValue ≥ previousValue) {
29
                     decimalValue += currentValue;
30
31
                 } else {
32
                     decimalValue -= currentValue;
33
                 previousValue = currentValue;
34
35
36
37
             return decimalValue;
38
39
```