2427. Number of Common Factors

```java
import java.util.Scanner;

public class CommonFactors {

  public static void main(String[] args) {
   Scanner scanner = new Scanner(System.in);

   // Input two numbers from the user
   System.out.print("Enter the first number: ");
   int num1 = scanner.nextInt();

   System.out.print("Enter the second number: ");
   int num2 = scanner.nextInt();

   // Calculate and display the common factors
   int commonFactors = findCommonFactors(num1, num2);
   System.out.println("Number of common factors: " + commonFactors);

   scanner.close();
  }

 // Function to find the number of common factors between two numbers
 private static int findCommonFactors(int a, int b) {
  int commonFactorsCount = 0;
  int smallerNumber = Math.min(a, b);

  for (int i = 1; i <= smallerNumber; i++) {
   if (a % i == 0 && b % i == 0) {
     commonFactorsCount++;
```

```
    }
  }


  return commonFactorsCount;
 }
```

Output

2063. Vowels of All Substrings

```java
import java.util.Scanner;


public class VowelsOfAllSubstrings {


  public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);


    // Input a string from the user
    System.out.print("Enter a string: ");
    String inputString = scanner.nextLine();


    // Display vowels of all substrings
```

```java
    displayVowelsOfSubstrings(inputString);

    scanner.close();
  }

  // Function to check if a character is a vowel
  private static boolean isVowel(char c) {
    return "aeiouAEIOU".indexOf(c) != -1;
  }

  // Function to display vowels of all substrings
  private static void displayVowelsOfSubstrings(String str) {
    System.out.println("Vowels of all substrings:");

    for (int i = 0; i < str.length(); i++) {
      for (int j = i + 1; j <= str.length(); j++) {
        String substring = str.substring(i, j);
        System.out.print(substring + ": ");

        for (char c : substring.toCharArray()) {
          if (isVowel(c)) {
            System.out.print(c);
          }
        }

        System.out.println();
      }
    }
  }
```

}

output

PS C:\Users\Ajeet\Desktop\java> javac VowelsOfAllSubstrings.java

PS C:\Users\Ajeet\Desktop\java> java VowelsOfAllSubstrings

Enter a string: ajeet singh

Vowels of all substrings:

a: a

aj: a

aje: ae

ajee: aee

ajeet: aee

ajeet : aee

ajeet s: aee

ajeet si: aeei

ajeet sin: aeei

ajeet sing: aeei

ajeet singh: aeei

j:

je: e

jee: ee

jeet: ee

jeet : ee

jeet s: ee

jeet si: eei

jeet sin: eei

jeet sing: eei

jeet singh: eei

e: e

ee: ee

eet: ee

eet : ee

eet s: ee

eet si: eei

eet sin: eei

eet sing: eei

eet singh: eei

e: e

et: e

et : e

et s: e

et si: ei

et sin: ei

et sing: ei

et singh: ei

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t s:

t si: i

t sin: i

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t singh: i

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 si: i

 sin: i

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si: i

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