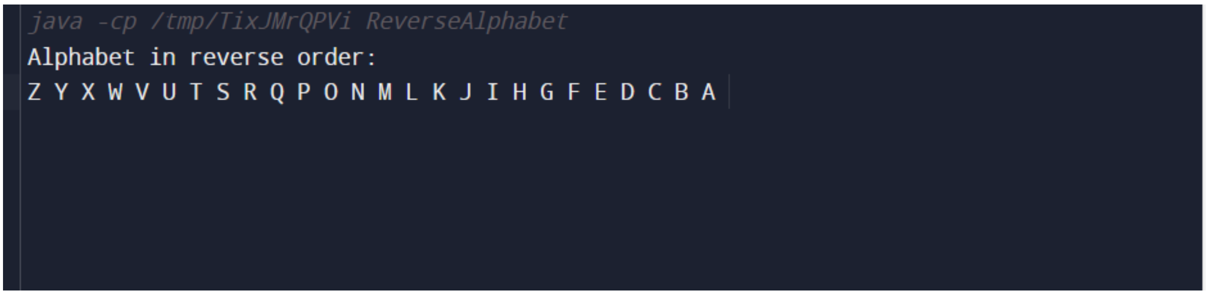
CLASS TEST 1

1. ReverseAlphabet

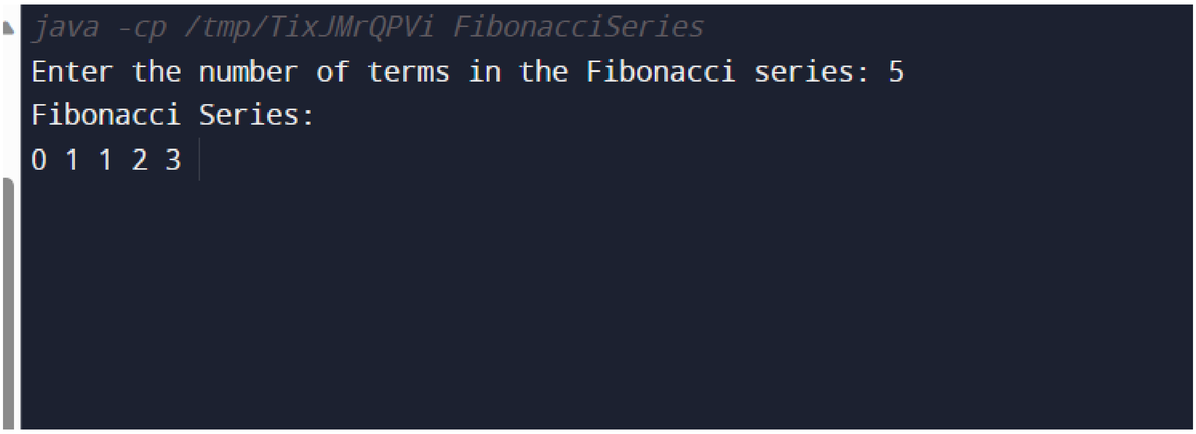
```
public class ReverseAlphabet {
    public static void main(String[] args) {
        // ASCII values for uppercase English alphabets
        int start = 'Z';
        int end = 'A';

        System.out.println("Alphabet in reverse order:");

        for (int i = start; i >= end; i--) {
            System.out.print((char) i + " ");
        }
    }
}
```



```
java -cp /tmp/TixJMrQPVi ReverseAlphabet
Alphabet in reverse order:
Z Y X W V U T S R Q P O N M L K J I H G F E D C B A
```

2. FibonacciSeries

```
import java.util.Scanner;

public class FibonacciSeries {

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

        System.out.print("Enter the number of terms in the Fibonacci series: ");
        int n = scanner.nextInt();

        System.out.println("Fibonacci Series:");
        printFibonacciSeries(n);

        scanner.close();
    }

    private static void printFibonacciSeries(int n) {
        int firstTerm = 0, secondTerm = 1;

        for (int i = 0; i < n; i++) {
            System.out.print(firstTerm + " ");

            int nextTerm = firstTerm + secondTerm;
            firstTerm = secondTerm;
            secondTerm = nextTerm;
        }
    }
}
```

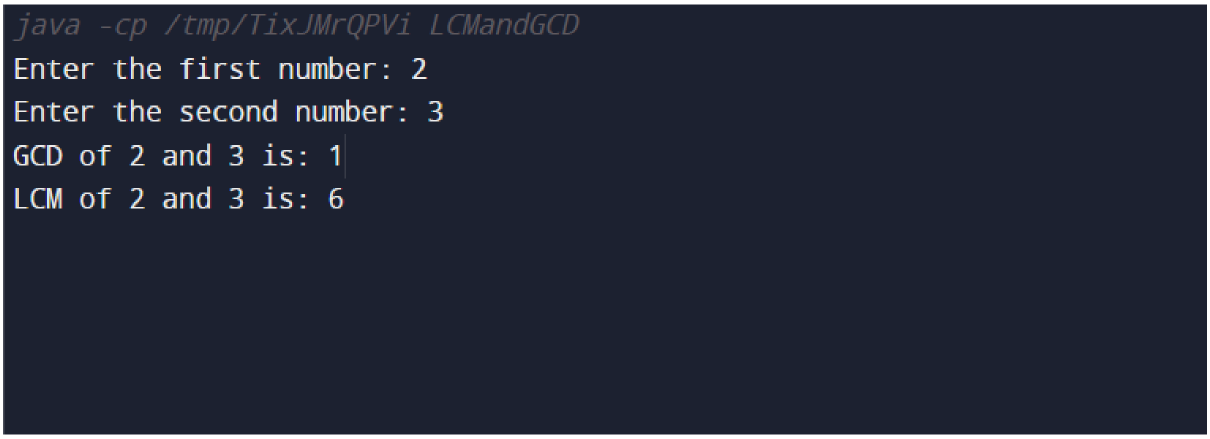


```
java -cp /tmp/TixJMrQPVi FibonacciSeries
Enter the number of terms in the Fibonacci series: 5
Fibonacci Series:
0 1 1 2 3
```

3. LCMandGCD

```
import java.util.Scanner;

public class LCMandGCD {

  // Function to calculate GCD using Euclidean algorithm
  public static int calculateGCD(int a, int b) {
    while (b != 0) {
      int temp = b;
      b = a % b;
      a = temp;
    }
    return a;
  }

  // Function to calculate LCM using the formula: LCM(a, b) = |a * b| / GCD(a, b)
  public static int calculateLCM(int a, int b) {
    int gcd = calculateGCD(a, b);
    return Math.abs(a * b) / gcd;
  }
```

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

        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 GCD
        int gcd = calculateGCD(num1, num2);
        System.out.println("GCD of " + num1 + " and " + num2 + " is: " + gcd);

        // Calculate and display LCM
        int lcm = calculateLCM(num1, num2);
        System.out.println("LCM of " + num1 + " and " + num2 + " is: " + lcm);

        scanner.close();
    }
}
```



```
java -cp /tmp/TixJMrQPVi LCMandGCD
Enter the first number: 2
Enter the second number: 3
GCD of 2 and 3 is: 1
LCM of 2 and 3 is: 6
```