

SOLUTION 1:

```
import java.util.Scanner;

public class FirstQuestion {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        System.out.println("Input: ");

        int N = scanner.nextInt();

        int a = 0;

        int b = 0;

        int c = 550;

        for (int i = 1; i < N; i++) {

            int temp = a + b + c;

            a = b;

            b = c;

            c = temp;

        }

        System.out.println("Output: " + c);

    }

}
```

SOLUTION2:

```
import java.util.Random;

import java.util.Scanner;

public class SecondQuestion {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter a string: ");

        String inputString = scanner.nextLine();

        System.out.println("Input: ");

        char inputChar = scanner.next().charAt(0);

        long frequency = inputString.chars().filter(ch -> ch == inputChar).count();

        System.out.println("Frequency of " + inputChar + " = " + frequency);

        String[] words = inputString.split(" ");

        StringBuilder finalString = new StringBuilder();

        for (String word : words) {

            finalString.append(word.substring(0, 1).toUpperCase()).append(word.substring(1)).append(" ");

        }

        String specialCharacters = "!@#%$%^&*()";

        Random rand = new Random();

        char randomSpecialCharacter = specialCharacters.charAt(rand.nextInt(specialCharacters.length()));

    }

}
```

```
finalString.append(randomSpecialCharacter);

System.out.println("Final string = " + finalString);

}

}
```

SOLUTION 3:

```
import java.util.Scanner;

public class ThreeQuestion {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        System.out.println("Input: ");

        String inputString = scanner.nextLine();

        System.out.println("String to be replaced: ");

        String stringToBeReplaced = scanner.nextLine();

        System.out.println("String to be replaced with: ");

        String replacementString = scanner.nextLine();

        String outputString = inputString.replace(stringToBeReplaced, replacementString);

        StringBuilder numericalRepresentation = new StringBuilder();

        for (char c : replacementString.toCharArray()) {

            if (Character.isLetter(c)) {

                int charValue = Character.toLowerCase(c) - 'a' + 1;

                numericalRepresentation.append(charValue);

            }

        }

        outputString += " " + numericalRepresentation;

        System.out.println("Output: " + outputString);

    }

}
```