Java:-

A. Create an array with the values (1, 2, 3, 4, 5, 6, 7) and shuffle it.

```
import java.util.Arrays;
import java.util.Random;
public class ShuffleArray {
   public static void main(String[] args) {
      int[] array = {1, 2, 3, 4, 5, 6, 7};
      // Shuffle the array
      Random random = new Random();
      for (int i = array.length - 1; i > 0; i--) {
         int j = random.nextInt(i + 1);
         int temp = array[i];
         array[i] = array[j];
         array[j] = temp;
      }
      // Print the shuffled array
      System.out.println(Arrays.toString(array));
   }
}
```

Output:-

[7, 6, 5, 1, 3, 4, 2]

B. Enter a Roman Number as input and convert it to an integer. (ex IX = 9)

```
import java.util.HashMap;
import java.util.Scanner;
public class RomanToIntegerWithUserInput {
```

```
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a Roman numeral: ");
        String romanNumeral = scanner.nextLine().toUpperCase(); // Convert to uppercase for case-insensitivity
        int result = romanToInteger(romanNumeral);
        System.out.println("The integer value of " + romanNumeral + " is: " + result);
    }
    public static int romanToInteger(String s) {
        // Create a HashMap to store the values of Roman numerals
        HashMap<Character, Integer> romanValues = new HashMap<>();
        romanValues.put('I', 1);
        romanValues.put('V', 5);
        romanValues.put('X', 10);
        romanValues.put('L', 50);
        romanValues.put('C', 100);
        romanValues.put('D', 500);
        romanValues.put('M', 1000);
        int result = 0;
        int prevValue = 0;
        // Iterate through the Roman numeral string from right to left
        for (int i = s.length() - 1; i >= 0; i--) {
            int curValue = romanValues.get(s.charAt(i));
            // If the current value is less than the previous value, subtract it
            if (curValue < prevValue) {
                result -= curValue;
```

```
            }
 else {
                result += curValue;
            }
            prevValue = curValue;
        }
        return result;
    }
}
```

Output:-

```
Enter a Roman numeral: XII
The integer value of XII is: 12
```

C. Check if the input is pangram or not.(Pangram is a sentence that contains all the alphabet from a-z)

```
import java.util.HashSet;
import java.util.Scanner;
import java.util.Set;
public class PangramCheckerWithUserInput {
    public static boolean isPangram(String sentence) {
        Set<Character> alphabetSet = new HashSet<>();
        for (int i = 0; i < sentence.length(); i++) {
            char c = sentence.charAt(i);
            if (Character.isLetter(c)) {
                alphabetSet.add(Character.toLowerCase(c));
            }
```

```
        }
        return alphabetSet.size() == 26;
    }
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter a sentence: ");
        String sentence = scanner.nextLine();
        boolean isPangram = isPangram(sentence);
        System.out.println(sentence + " is a pangram: " + isPangram);
    }
}
```

Output:-

```
Enter a sentence: abdefghijklmnopqrstuvwqyz
abdefghijklmnopqrstuvwqyz is a pangram: false
```