Zachary Nimmons and Blas Kojusner

COP2800 Assignment 3

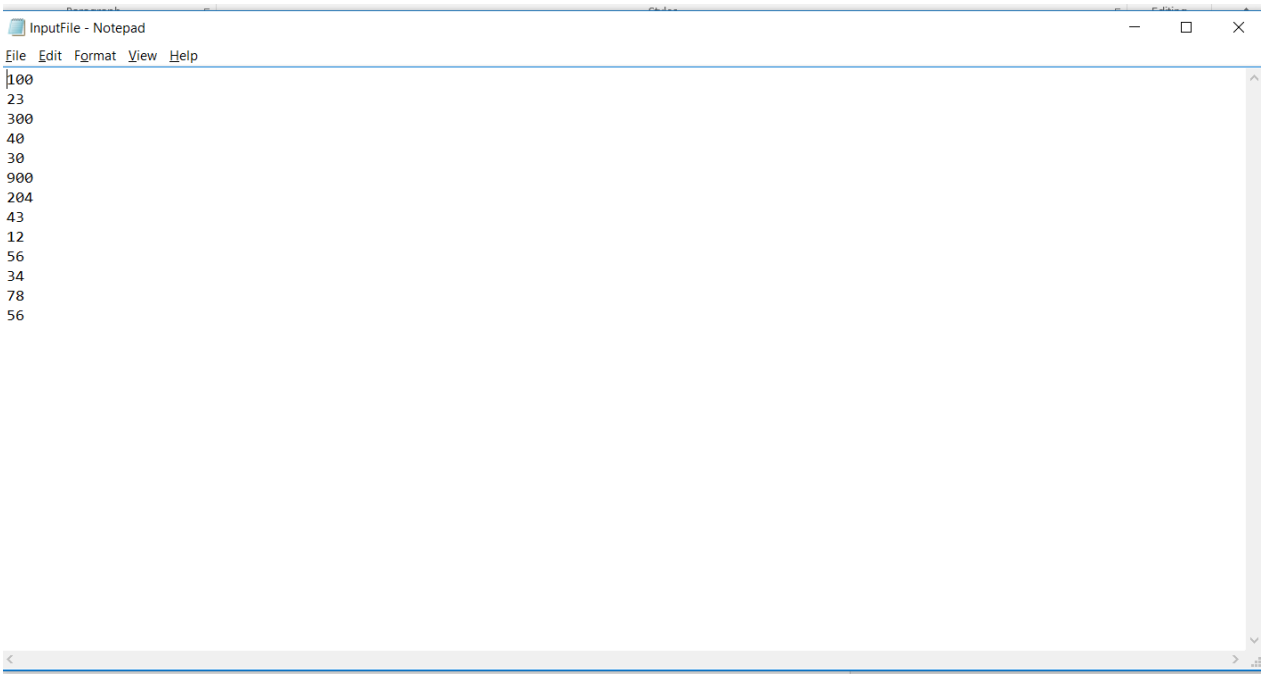
Program code:

```
package assignmentnum3;


import java.io.File;
import java.io.FileNotFoundException;
import java.io.PrintWriter;
import java.util.ArrayList;
import java.util.Scanner;


/**
 * @authors Zach & Blas
 */
public class AssignmentNum3 {
   public static void main(String[] args) {


      try{
         File textinput = new File ("C:/InputFile.txt");
         ArrayList <String> numbers;
         try (Scanner sc = new Scanner (textinput)) {
            numbers = new ArrayList<>();
            while (sc.hasNextLine()) {
               String fileInputLine = sc.nextLine();
               numbers.add(fileInputLine);
            }
         }


         try (PrintWriter writer = new PrintWriter ("C:/output.txt")) {
```

```
            int total = countNumbersInFile(numbers);
            int max = maximumInFile(numbers);
            int min = minimumInFile(numbers);
            double avg = averageInFile(numbers);

            writer.println("Counter: "+ total + " numbers");
            writer.println("Maximum Value: "+ max);
            writer.println("Minimum Value: "+ min);
            writer.println("Average Value: "+ avg);
        }
    }
    catch(FileNotFoundException e){
        System.out.println("ERROR");
    }
}
public static int countNumbersInFile(ArrayList<String> NumFile){
    return NumFile.size();
}
public static int maximumInFile (ArrayList<String> NumFile){
    int maxList = Integer.parseInt(NumFile.get(0));
    for (int i=1; i<NumFile.size(); i++){
        int num = Integer.parseInt(NumFile.get(i));
        if (num > maxList){
            maxList = num;
        }
    }
    return maxList;
}
public static int minimumInFile (ArrayList<String> NumFile){
```

```
        int minList =Integer.parseInt(NumFile.get(0));
        for (int i=1; i<NumFile.size(); i++){
            int num = Integer.parseInt(NumFile.get(i));
            if (minList > num){
                minList = num;
            }
        }
        return minList;
    }
    public static double averageInFile (ArrayList<String> NumFile){
        double sum = 0;
        for (int i=0; i<NumFile.size(); i++){
            int num = Integer.parseInt(NumFile.get(i));
            sum = sum + num;
        }
        double avgNum = sum/NumFile.size();
        return avgNum;
    }
}
```

Input file:



Output file: