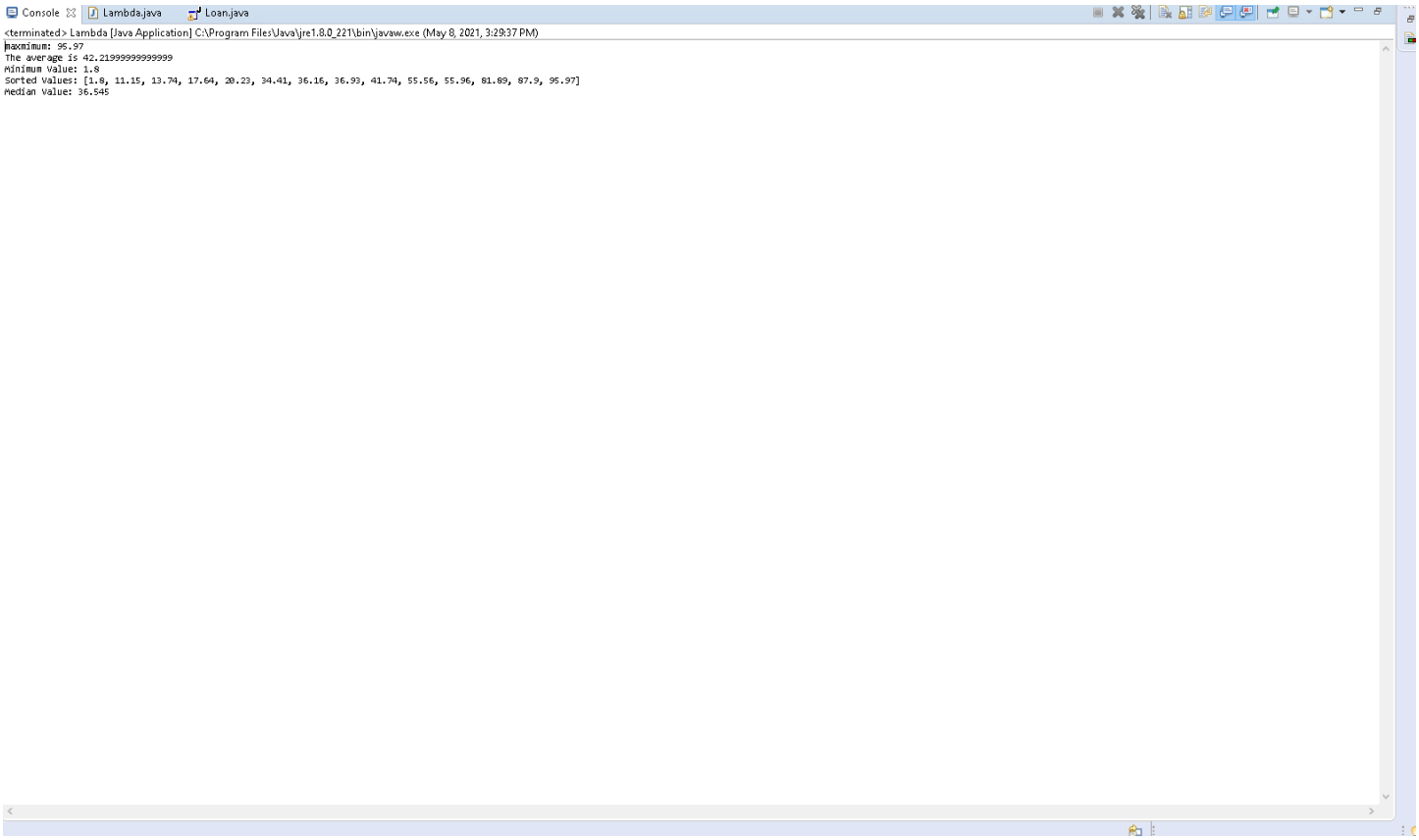
This program provides the average, maximum, minimum, and median value for the array list provided. In order to get the maximum, minimum, and average value I used a lambda expression for each of them. The first two uses the collections.max and min to find those values through out an array. For the average value I use a block lambda to compute the average of the list that was provided in the main method. In the main method I call the block method to display the three values. Then I take the array and use the Collection.sort to sort the array in order. Then displayed the sorted values. Once those values are sorted I used a if/else statement to calculate the median value by seeing if there is a middle value in the array list.

```
import java.util.Arrays;
import java.util.Collections;
import java.util.Comparator;
import java.util.List;

interface DoubleNumericListFunc
{
   double func(List<Double> dd);
}
class Lambda
{
   // lambda block to calculate the average of the array.
   static DoubleNumericListFunc average = (dd) ->
   {
      double sum = 0;

      if (dd.size() == 0){
      }

      for (int i = 0; i < dd.size(); i++) {
         sum += dd.get(i);
      }

      return sum / dd.size();
   };

   Static String block(List<Double> dd)
   {
        // lambda expressions to calculate the maximum and minimum values. Also displays values
      double maxValue = Collections.max(dd, Comparator.comparingDouble( value -> value));
      System.out.println("maxmimum: " + maxValue);
      double minValue = Collections.min(dd, Comparator.comparingDouble(value -> value));
      String minValue1 = "Minimum Value: " +minValue;
      System.out.println("The average is " + average.func(dd));
      return minValue1;
   }

public static void main(String[]args)
{
   List<Double> dd = Arrays.asList(17.64, 55.56, 36.93, 55.96, 20.23, 41.74, 1.8, 95.97, 81.89, 36.16, 34.41,
         87.9, 13.74, 11.15);
   String values = block(dd);
   System.out.println(values);
   Collections.sort(dd);
   System.out.println("Sorted Values: " +dd);
   double medianValue = 0;
   // produces median value from the listed values in the array
  if(dd.size()%2 == 0)
  {
    medianValue = (dd.get(dd.size()/2)+dd.get(dd.size()/2 - 1))/2;
  }else {
     medianValue = dd.get(dd.size()/2);
  }
  System.out.println("Median Value: " +medianValue);
}
}
```


Console
Lambda.java
Loan.java
<terminated> Lambda [Java Application] C:\Program Files\Java\jre1.8.0_221\bin\javaw.exe (May 8, 2021, 3:29:37 PM)
maximum: 95.97
The average is 42.21999999999999
Minimum Value: 1.8
Sorted Values: [1.8, 11.15, 13.74, 17.64, 20.23, 34.41, 36.16, 36.93, 41.74, 55.56, 55.96, 81.89, 87.9, 95.97]
Median Value: 36.545