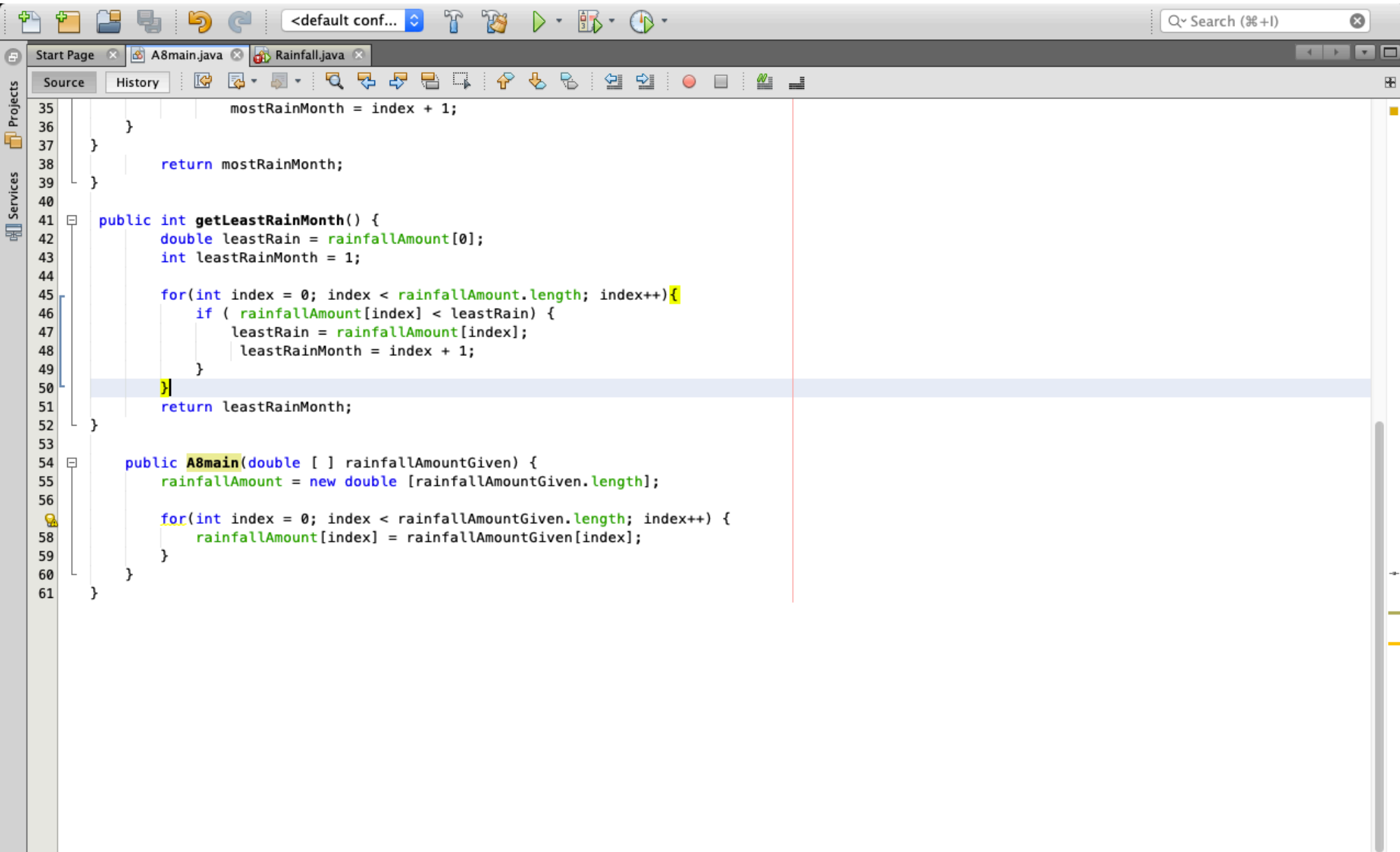


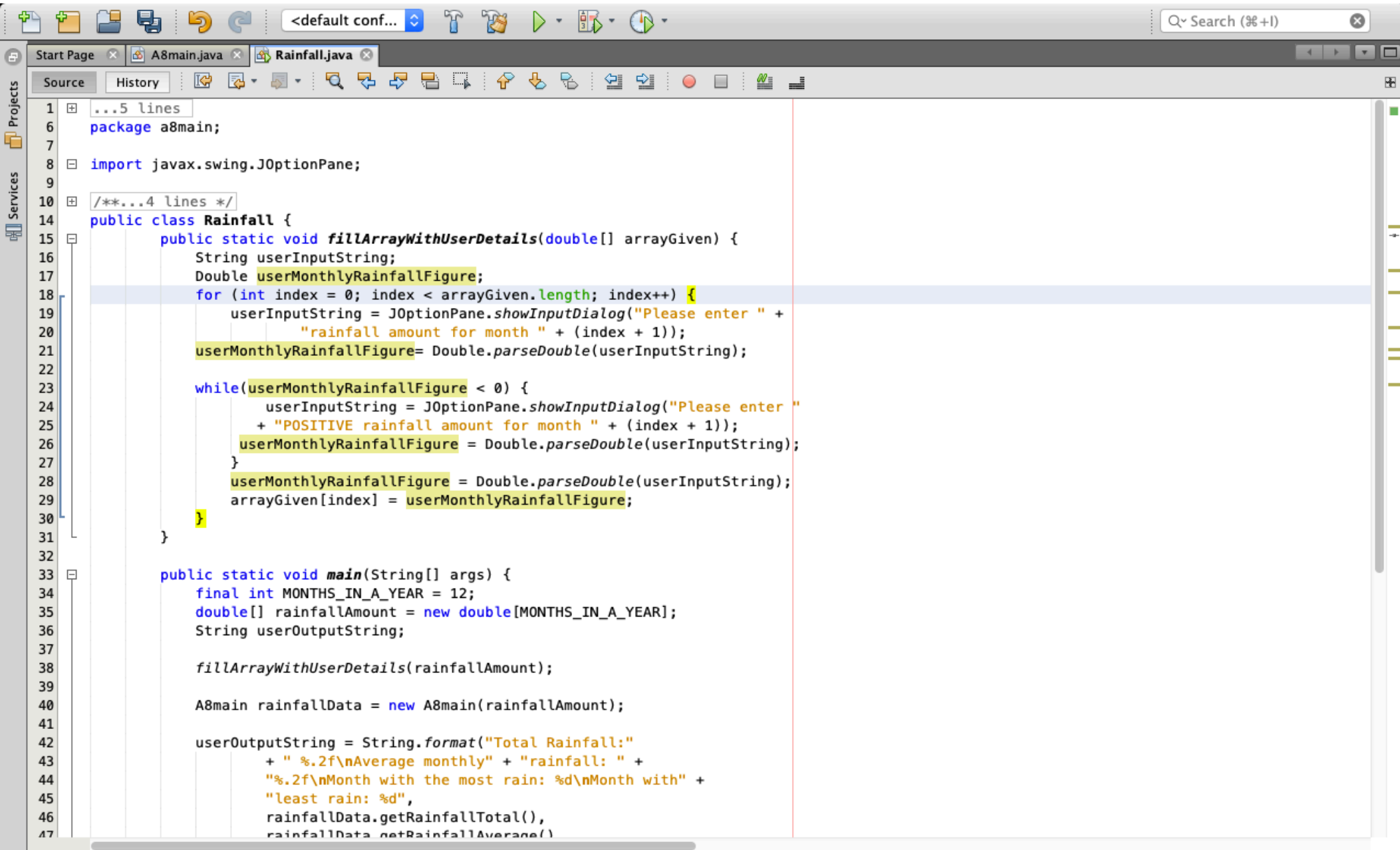
```
6 package a8main;
7
8 /**
9  *
10  * @author jonathangarcia
11  */
12 public class A8main {
13     double [ ] rainfallAmount;
14
15     public double getRainfallTotal () {
16         double rainfallTotal = 0;
17
18         for(int index = 0; index < rainfallAmount.length; index++){
19             rainfallTotal = rainfallTotal + rainfallAmount [index];
20         }
21         return rainfallTotal;
22     }
23
24     public double getRainfallAverage() {
25         return getRainfallTotal() / rainfallAmount.length;
26     }
27
28     public int getMostRainMonth() {
29         double mostRain = rainfallAmount[0];
30         int mostRainMonth = 1;
31
32         for(int index = 0; index < rainfallAmount.length; index++){
33             if ( rainfallAmount[index] > mostRain) {
34                 mostRain = rainfallAmount[index];
35                 mostRainMonth = index + 1;
36             }
37         }
38         return mostRainMonth;
39     }
40
41     public int getLeastRainMonth() {
42         double leastRain = rainfallAmount[0];
43         int leastRainMonth = 1;
44
45         for(int index = 0; index < rainfallAmount.length; index++){
46             if ( rainfallAmount[index] < leastRain) {
```



The screenshot shows an IDE window with two tabs: 'A8main.java' and 'Rainfall.java'. The 'Rainfall.java' tab is active, displaying the following Java code:

```
35         mostRainMonth = index + 1;
36     }
37 }
38     return mostRainMonth;
39 }
40
41 public int getLeastRainMonth() {
42     double leastRain = rainfallAmount[0];
43     int leastRainMonth = 1;
44
45     for(int index = 0; index < rainfallAmount.length; index++){
46         if ( rainfallAmount[index] < leastRain) {
47             leastRain = rainfallAmount[index];
48             leastRainMonth = index + 1;
49         }
50     }
51     return leastRainMonth;
52 }
53
54 public A8main(double [ ] rainfallAmountGiven) {
55     rainfallAmount = new double [rainfallAmountGiven.length];
56
57     for(int index = 0; index < rainfallAmountGiven.length; index++) {
58         rainfallAmount[index] = rainfallAmountGiven[index];
59     }
60 }
61 }
```

The code defines a class with two methods: `getLeastRainMonth()` and `A8main()`. `getLeastRainMonth()` iterates through the `rainfallAmount` array to find the month with the least rain. `A8main()` initializes the `rainfallAmount` array based on the input `rainfallAmountGiven`.



```
1  ...5 lines
6  package a8main;
7
8  import javax.swing.JOptionPane;
9
10 /**...4 lines */
14 public class Rainfall {
15     public static void fillArrayWithUserDetails(double[] arrayGiven) {
16         String userInputString;
17         Double userMonthlyRainfallFigure;
18         for (int index = 0; index < arrayGiven.length; index++) {
19             userInputString = JOptionPane.showInputDialog("Please enter " +
20                 "rainfall amount for month " + (index + 1));
21             userMonthlyRainfallFigure = Double.parseDouble(userInputString);
22
23             while(userMonthlyRainfallFigure < 0) {
24                 userInputString = JOptionPane.showInputDialog("Please enter "
25                     + "POSITIVE rainfall amount for month " + (index + 1));
26                 userMonthlyRainfallFigure = Double.parseDouble(userInputString);
27             }
28             userMonthlyRainfallFigure = Double.parseDouble(userInputString);
29             arrayGiven[index] = userMonthlyRainfallFigure;
30         }
31     }
32
33     public static void main(String[] args) {
34         final int MONTHS_IN_A_YEAR = 12;
35         double[] rainfallAmount = new double[MONTHS_IN_A_YEAR];
36         String userOutputString;
37
38         fillArrayWithUserDetails(rainfallAmount);
39
40         A8main rainfallData = new A8main(rainfallAmount);
41
42         userOutputString = String.format("Total Rainfall:"
43             + " %.2f\nAverage monthly" + "rainfall: " +
44             "%.2f\nMonth with the most rain: %d\nMonth with" +
45             "least rain: %d",
46             rainfallData.getRainfallTotal(),
47             rainfallData.getRainfallAverage())
```

The screenshot shows an IDE window with a toolbar at the top containing icons for file operations, running, and debugging. The title bar shows the current file is `Rainfall.java`. The editor displays the following Java code:

```
23 while(userMonthlyRainfallFigure < 0) {
24     userInputString = JOptionPane.showInputDialog("Please enter "
25         + "POSITIVE rainfall amount for month " + (index + 1));
26     userMonthlyRainfallFigure = Double.parseDouble(userInputString);
27 }
28 userMonthlyRainfallFigure = Double.parseDouble(userInputString);
29 arrayGiven[index] = userMonthlyRainfallFigure;
30 }
31 }
32
33 public static void main(String[] args) {
34     final int MONTHS_IN_A_YEAR = 12;
35     double[] rainfallAmount = new double[MONTHS_IN_A_YEAR];
36     String userOutputString;
37
38     fillArrayWithUserDetails(rainfallAmount);
39
40     A8main rainfallData = new A8main(rainfallAmount);
41
42     userOutputString = String.format("Total Rainfall: "
43         + " %.2f\nAverage monthly rainfall: " +
44         "%.2f\nMonth with the most rain: %d\nMonth with " +
45         "least rain: %d",
46         rainfallData.getRainfallTotal(),
47         rainfallData.getRainfallAverage(),
48         rainfallData.getMostRainMonth(),
49         rainfallData.getLeastRainMonth());
50
51     JOptionPane.showMessageDialog(null, userOutputString);
52     System.exit(0);
53 }
54 }
55
```

The code implements a program that prompts the user to enter rainfall amounts for 12 months, calculates the total, average, and the months with the most and least rainfall, and displays the results in a message dialog.

a8main - NetBeans IDE 8.2

Q Search (%+l)

Start Page x A8main.java x Rainfall.java x

Source History

```
1  /*
2  * To change this license header, choose License Headers in Project Properties.
3  * To change this template file, choose Tools | Templates
4  * and open the template in the editor.
5  */
6  package a8main;
7
8  import javax.swing.JOptionPane;
9
10 /**
11  *
12  * @author jonathangarcia
13  */
14 public class Rainfall {
15     public static void fillArrayWithRainfall(
16         String userInputString;
17         Double userMonthlyRainfall;
18         for (int index = 0; index < arrayGiven.length; index++) {
19             userInputString = JOptionPane.showInputDialog("Please enter " +
```

Input

Please enter rainfall amount for month 1

Cancel OK

Output - a8main (run)

run:

a8main (run) running... 12:26 | INS

a8main - NetBeans IDE 8.2

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Q Search (⌘+I)

Start Page A8main.java Rainfall.java

Source History

```
41
42
43     userOutputString = String.format("Total Rainfall: "
44                                     + " %.2f\nAverage monthly rainfall: " +
45                                     "%.2f\nMonth with the most rain: %d\nMonth with " +
46                                     "least rain: %d",
47                                     rainfallData.getRainfallTotal(),
48                                     rainfallData.getRainfallAverage(),
49                                     rainfallData.getMostRainMonth(),
50                                     rainfallData.getLeastRainMonth());
51
52     JOptionPane.showMessageDialog(null, userOutputString);
53     System.exit(0);
54 }
55
```

Output - a8main (run)

run:

run: |

Message

Total Rainfall: 77.00
Average monthly rainfall: 6.42
Month with the most rain: 2
Month with least rain: 11

OK

a8main (run) running... 45:5 | INS