

## src\ArrayDemo.java

```
1  import java.util.Arrays;
2
3  public class ArrayDemo {
4      public static void main(String[] args){
5          int[] a = {1,2,3};
6          String s = "helloworld";
7          String x = "spot";
8          String y = "stop";
9          String x1 = "Banana";
10         String y1 = "Nab";
11
12         System.out.println(Arrays.toString(letterHist(s)));
13         System.out.println(isAnagram(x, y));
14         System.out.println(canSpell(x1, y1));
15
16
17     }
18     public static void modifier(int[] a){
19         for (int i = 0; i < a.length; i++) {
20             a[i]= Math.abs(a[i]);
21         }
22     }
23     public static int[] functional(int[] a){
24
25         int[] b = new int[a.length];
26         for (int i = 0; i < a.length; i++) {
27             b[i] = a[i];
28         }
29         return b;
30     }
31     public static int[] letterHist(String s){ //7.7
32         int [] counts = new int[26];
33         String lower = s.toLowerCase();
34
35         for (int i = 0; i < lower.length(); i++) {
36             char letter = lower.charAt(i);
37             // int index = 0;
38             int index = (int) letter - 'a';
39             counts[index]++;
40
41         }
42         return counts;
43     }
44     public static boolean isAnagram(String x, String y){ //7.8
45         int[] arrX = letterHist(x);
46         int[] arrY = letterHist(y);
47         for (int i = 0; i < arrX.length; i++) {
48             if (arrX[i] == arrY[i]) {
49                 return true;
50             }
51         }
52         return false;
53     }
```

```
54     }
55     public static boolean canSpell (String x, String y){ //6.6
56         int[] arrX = letterHist(x);
57         int[] arrY = letterHist(y);
58         for (int i = 0; i < arrX.length; i++) {
59             if (arrX[i] < arrY[i]) {
60                 return true;
61             }
62         }
63         return false;
64     }
65 }
66
67
68
69
70
```