

ArrayIntersection.java

```
1 package IntersectionOfTwoArrays;
2 import java.util.*;
3
4 public class ArrayIntersection {
5
6     public static int[] sumElement(int[] x, int intersect)
7     {
8         int[] output = Arrays.copyOf(x, x.length+1);
9         output[x.length] = intersect;
10        return output;
11    }
12
13    public static int[] IntersectElement(int[] y, int[] z)
14    {
15        int[] inter = {};
16        int i = 0, j = 0;
17
18        while(i<y.length && j<z.length)
19        {
20            if(y[i] < z[j])
21            {
22                i++;
23            }
24            else if(y[i] == z[j])
25            {
26                inter = sumElement(inter, y[i]);
27                i++;
28                j++;
29            }
30            else
31            {
32                j++;
33            }
34        }
35        return inter;
36    }
37
38    public static void main(String args[])
39    {
40        int[] y = {56,70,8,2,10,700,1000,23,13};
41        int[] z = {2,500,70,24,13,8,80,1};
42        ArrayIntersection aint = new ArrayIntersection();
43
44        Arrays.sort(y);
45        Arrays.sort(z);
46
47        int[] output = ArrayIntersection.IntersectElement(y,z);
48        System.out.println("The result of intersection is: " + Arrays.toString(output));
49    }
50
51 }
52
```