

```

1 package ch.publiccept;
2
3 import java.util.Scanner;
4
5 /**
6  * MainScannerExample
7  * public static void main(String[] args)
8  * Enter
9  *
10 * getIntegers(int numberOfArrayElements)
11 * getAverage(int[] array)
12 *
13 * @author created by Urs Albisser, on 2019-12-30
14 * @version 0.0.1
15 */
16 public class MainScannerExample {
17
18
19
20     // == fields ==
21     private static Scanner scanner = new Scanner(System.in);
22
23
24
25     /**
26     * main()
27     *
28     * @param args args
29     */
30     public static void main(String[] args) {
31
32         // initialize array = new int[5] by using the Scanner
33         int[] myIntegers = getIntegerArrayByScanner(5);
34
35         // print array values
36         for(int i=0; i<myIntegers.length; i++) {
37             System.out.println("Element " + i + ", entered value " + myIntegers[i]);
38         }
39
40         // print mean of array values
41         System.out.println("The average is " + getAverage(myIntegers));
42     }
43
44
45
46     /**
47     * getIntegers()
48     * Initialize array with individual numbers using the Scanner.
49     * @param arrayLength Array length
50     * @return Initialized array[]
51     */
52     public static int[] getIntegerArrayByScanner(int arrayLength) {
53
54         int[] array = new int[arrayLength];
55
56         System.out.println("Enter " + arrayLength + " integer values...\r");
57
58         for(int i=0; i<array.length; i++) {
59             System.out.print("Enter value " + (i+1) + ": ");
60             array[i] = scanner.nextInt();
61         }
62
63         return array;
64     }
65
66
67
68     /**
69     * getAverage()
70     * Calculate the mean of an array.
71     * @param array Array to be calculated
72     * @return Average of array values
73     */
74     public static double getAverage(int[] array) {
75
76         int sum = 0;
77
78         for(int i=0; i<array.length; i++) {
79             sum += array[i];
80         }
81
82         return (double)sum / (double)array.length; // casting int to double
83     }
84 }
85

```