

```
1 package ProgEx01;
2 import java.util.Scanner;
3 /*
4  * The program will take a certain amount of input from the user and will output how many
   times each number between 0 and 50 inclusive were inputted
5  * @author: Anthony Blaziak
6  * 4/8/22
7  */
8 public class ProgEx01
9 {
10     public static void main(String[] args)
11     {
12         Scanner scan = new Scanner(System.in);
13         System.out.println("Input how many numbers you are going to enter into the program.");
14         int limit = scan.nextInt();
15         int[] numbers = new int[limit];
16         int[] counts = new int[51];
17         int x = 0;
18         for (int i = 0; i < limit; i++)
19         {
20             System.out.println("Input a number that is within the range of 0 and 50
   inclusive");
21             x = scan.nextInt();
22             if (x >= 0 && x <= 50)
23                 numbers[i] = x;
24             else
25                 System.out.println("Number was not within the specified limits.");
26         }
27
28         for (int i = 0; i < 51; i++)
29         {
30             counts[i] = 0;
31         }
32
33         for (int i = 0; i < limit; i++)
34         {
35             counts[numbers[i]]++;
36         }
37
38         for (int i = 0; i < 51; i++)
39         {
40             System.out.println("The amount of times that " + i + " appeared in the program
   was: " + counts[i]);
41         }
42     }
43 }
44 /*
45 Output:
46 Input how many numbers you are going to enter into the program.
47 5
48 Input a number that is within the range of 0 and 50 inclusive
49 1056
50 Number was not within the specified limits.
51 Input a number that is within the range of 0 and 50 inclusive
52 50
53 Input a number that is within the range of 0 and 50 inclusive
54 0
```

```
55 Input a number that is within the range of 0 and 50 inclusive
56 35
57 Input a number that is within the range of 0 and 50 inclusive
58 27
59 The amount of times that 0 appeared in the program was: 2
60 The amount of times that 1 appeared in the program was: 0
61 The amount of times that 2 appeared in the program was: 0
62 The amount of times that 3 appeared in the program was: 0
63 The amount of times that 4 appeared in the program was: 0
64 The amount of times that 5 appeared in the program was: 0
65 The amount of times that 6 appeared in the program was: 0
66 The amount of times that 7 appeared in the program was: 0
67 The amount of times that 8 appeared in the program was: 0
68 The amount of times that 9 appeared in the program was: 0
69 The amount of times that 10 appeared in the program was: 0
70 The amount of times that 11 appeared in the program was: 0
71 The amount of times that 12 appeared in the program was: 0
72 The amount of times that 13 appeared in the program was: 0
73 The amount of times that 14 appeared in the program was: 0
74 The amount of times that 15 appeared in the program was: 0
75 The amount of times that 16 appeared in the program was: 0
76 The amount of times that 17 appeared in the program was: 0
77 The amount of times that 18 appeared in the program was: 0
78 The amount of times that 19 appeared in the program was: 0
79 The amount of times that 20 appeared in the program was: 0
80 The amount of times that 21 appeared in the program was: 0
81 The amount of times that 22 appeared in the program was: 0
82 The amount of times that 23 appeared in the program was: 0
83 The amount of times that 24 appeared in the program was: 0
84 The amount of times that 25 appeared in the program was: 0
85 The amount of times that 26 appeared in the program was: 0
86 The amount of times that 27 appeared in the program was: 1
87 The amount of times that 28 appeared in the program was: 0
88 The amount of times that 29 appeared in the program was: 0
89 The amount of times that 30 appeared in the program was: 0
90 The amount of times that 31 appeared in the program was: 0
91 The amount of times that 32 appeared in the program was: 0
92 The amount of times that 33 appeared in the program was: 0
93 The amount of times that 34 appeared in the program was: 0
94 The amount of times that 35 appeared in the program was: 1
95 The amount of times that 36 appeared in the program was: 0
96 The amount of times that 37 appeared in the program was: 0
97 The amount of times that 38 appeared in the program was: 0
98 The amount of times that 39 appeared in the program was: 0
99 The amount of times that 40 appeared in the program was: 0
100 The amount of times that 41 appeared in the program was: 0
101 The amount of times that 42 appeared in the program was: 0
102 The amount of times that 43 appeared in the program was: 0
103 The amount of times that 44 appeared in the program was: 0
104 The amount of times that 45 appeared in the program was: 0
105 The amount of times that 46 appeared in the program was: 0
106 The amount of times that 47 appeared in the program was: 0
107 The amount of times that 48 appeared in the program was: 0
108 The amount of times that 49 appeared in the program was: 0
109 The amount of times that 50 appeared in the program was: 1
110 */
111
```