

```
1 package ProgEx04;
2 import java.util.Scanner;
3 /**
4 4/12/22
5 @author: Anthony Blaziak
6 The program takes inputs between 1 and 100 and puts it into a chart
7 */
8 public class ProgEx04
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[101];
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 1 and 100");
21             x = scan.nextInt();
22             if (x >= 1 && x <= 100)
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 < 10; i++)
29         {
30             counts[i] = 0;
31         }
32         for (int i = 0; i < limit; i++)
33         {
34             if (numbers[i] >= 1 && numbers[i] <= 10)
35                 counts[0]++;
36             else if (numbers[i] >= 11 && numbers[i] <= 20)
37                 counts[1]++;
38             else if (numbers[i] >= 21 && numbers[i] <= 30)
39                 counts[2]++;
40             else if (numbers[i] >= 31 && numbers[i] <= 40)
41                 counts[3]++;
42             else if (numbers[i] >= 41 && numbers[i] <= 50)
43                 counts[4]++;
44             else if (numbers[i] >= 51 && numbers[i] <= 60)
45                 counts[5]++;
46             else if (numbers[i] >= 61 && numbers[i] <= 70)
47                 counts[6]++;
48             else if (numbers[i] >= 71 && numbers[i] <= 80)
49                 counts[7]++;
50             else if (numbers[i] >= 81 && numbers[i] <= 90)
51                 counts[8]++;
52             else if (numbers[i] >= 91 && numbers[i] <= 100)
53                 counts[9]++;
54         }
55         System.out.println("-----");
56
57
```

```
58      System.out.print("|1-10: | ");
59      for (int i = 0; i < counts[0]; i++)
60      {
61          System.out.print("*");
62      }
63      System.out.print(" |");
64      System.out.println();
65      System.out.print("|11-20: | ");
66      for (int i = 0; i < counts[1]; i++)
67      {
68          System.out.print(" *");
69      }
70      System.out.print(" |");
71      System.out.println();
72      System.out.print("|21-30: | ");
73      for (int i = 0; i < counts[2]; i++)
74      {
75          System.out.print(" *");
76      }
77      System.out.print(" |");
78      System.out.println();
79      System.out.print("|31-40: | ");
80      for (int i = 0; i < counts[3]; i++)
81      {
82          System.out.print(" *");
83      }
84      System.out.print(" |");
85      System.out.println();
86
87      System.out.print("|41-50: | ");
88      for (int i = 0; i < counts[4]; i++)
89      {
90          System.out.print(" *");
91      }
92      System.out.print(" |");
93      System.out.println();
94      System.out.print("|51-60: | ");
95      for (int i = 0; i < counts[5]; i++)
96      {
97          System.out.print(" *");
98      }
99      System.out.print(" |");
100     System.out.println();
101     System.out.print("|61-70: | ");
102     for (int i = 0; i < counts[6]; i++)
103     {
104         System.out.print(" *");
105     }
106     System.out.print(" |");
107     System.out.println();
108     System.out.print("|71-80: | ");
109     for (int i = 0; i < counts[7]; i++)
110     {
111         System.out.print(" *");
112     }
113     System.out.print(" |");
114     System.out.println();
```

```

115         System.out.print("|81-90: | ");
116         for (int i = 0; i < counts[8]; i++)
117         {
118             System.out.print(" *");
119         }
120         System.out.print(" |");
121         System.out.println();
122         System.out.print("|91-100:| ");
123         for (int i = 0; i < counts[9]; i++)
124         {
125             System.out.print(" * ");
126         }
127         System.out.print("|");
128         System.out.println();
129
130         System.out.print("-----");
131
132     }
133 }
134 /*
135 Output:
136 Input how many numbers you are going to enter into the program.
137 10
138 Input a number that is within the range of 1 and 100
139 1
140 Input a number that is within the range of 1 and 100
141 11
142 Input a number that is within the range of 1 and 100
143 21
144 Input a number that is within the range of 1 and 100
145 31
146 Input a number that is within the range of 1 and 100
147 41
148 Input a number that is within the range of 1 and 100
149 51
150 Input a number that is within the range of 1 and 100
151 61
152 Input a number that is within the range of 1 and 100
153 71
154 Input a number that is within the range of 1 and 100
155 81
156 Input a number that is within the range of 1 and 100
157 91
158 -----
159 |1-10: | * |
160 |11-20: | * |
161 |21-30: | * |
162 |31-40: | * |
163 |41-50: | * |
164 |51-60: | * |
165 |61-70: | * |
166 |71-80: | * |
167 |81-90: | * |
168 |91-100:| * |
169 -----
170 */

```