**Computer Science I Lab06B – Occurrences**

**Lab Description :** Take a list of numbers that range in value from 0 to 9 and output how many occurrences of each number exist.

Programs needed:

Lab06B.java, Occurrences.java

Use the following private instance variable: **private int[] list;**

Write a constructor for a program called Occurrences that will accept an array of numbers that range in value from 0-9, and count the occurrences of each of the numbers. The occurrences will be stored in an array called list. The numbers will range from 0-9 only. The incoming array variable will be called inNums.

For example: [1, 5, 3, 4, 5, 5, 5, 4, 3, 2, 5, 5, 5, 3, 0, 4, 5] would result in:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | 1 | 1 | 3 | 3 | 8 | 0 | 0 | 0 | 0 |

[2, 3, 4, 5, 6, 7, 8, 9, 0, 2, 3, 5, 6, 8, 8, 8, 9, 4, 5] would result in:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | 0 | 2 | 2 | 2 | 3 | 2 | 1 | 4 | 2 |

**Sample Data :**

1 5 3 4 5 5 5 4 3 2 5 5 5 3 0 4 5

2 3 4 5 6 7 8 9 0 2 3 5 6 8 8 8 9 4 5

2 3 4 5 6 7 8 2 0 2 3 5 6 8 8 8 9 4 5

**Sample Output (part 1):**

Number Occurrences

0 - 1

1 - 1

2 - 1

3 - 3

4 - 3

5 - 8

6 - 0

7 - 0

8 - 0

9 - 0

Number Occurrences

0 - 1

1 - 0

2 - 2

3 - 2

4 - 2

5 - 3

6 - 2

7 - 1

8 - 4

9 - 2

Number Occurrences

0 - 1

1 - 0

2 - 3

3 - 2

4 - 2

5 - 3

6 - 2

7 - 1

8 - 4

9 - 1

**Sample Output (part 2):**

Number Occurrences

0 - 1 \*

1 - 1 \*

2 - 1 \*

3 - 3 \*\*\*

4 - 3 \*\*\*

5 - 8 \*\*\*\*\*\*\*\*

6 - 0

7 - 0

8 - 0

9 - 0

Number Occurrences

0 - 1 \*

1 - 0

2 - 2 \*\*

3 - 2 \*\*

4 - 2 \*\*

5 - 3 \*\*\*

6 - 2 \*\*

7 - 1 \*

8 - 4 \*\*\*\*

9 - 2 \*\*

Number Occurrences

0 - 1 \*

1 - 0

2 - 3 \*\*\*

3 - 2 \*\*

4 - 2 \*\*

5 - 3 \*\*\*

6 - 2 \*\*

7 - 1 \*

8 - 4 \*\*\*\*

9 - 1 \*