

Lab Goal : The lab was designed to teach you how to use arrays to simplify solving more complex problems.

Lab Description : Given a provided array, determine how many groups of a specified size exist. For the array `[1,1,1,2,2,2,3,3,3,4,5,6,7]`, there are 7 groups with at least one, 3 groups with at least 2, and 3 groups with at least 3. A group is a series of same values. `1 1 1` is a group of 3, but it also is a group of 1 and of 2. To count as a group, all values must be the same. `1 1 1` is a group of 3 because there are 3 1s in a row.

Sample Data :

```
3 3 3 3 3 9 4 4 4 5 5 5 5 6 6 7 7 7 8 8 8 8 8 8 8 8
1 2 3 4 5 6 7 8 9
1 1 1 2 1 1 3 3 3 3 3 3 3 3 3 3 4 4 4 5 4 4 4 6
```

Files Needed ::

```
ArrayStats.java
ArrayStatsRunner.java
```

Sample Output :

```
[3, 3, 3, 3, 3, 9, 4, 4, 4, 5, 5, 5, 5, 6, 6, 7, 7, 7, 8, 8, 8, 8, 8, 8, 8, 8]
size 1 count == 7
size 2 count == 6
size 3 count == 5
size 4 count == 3
size 5 count == 2
size 6 count == 1
```

```
[1, 2, 3, 4, 5, 6, 7, 8, 9]
size 1 count == 9
size 2 count == 0
size 3 count == 0
size 4 count == 0
```

```
[1, 1, 1, 2, 1, 1, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 4, 4, 4, 5, 4, 4, 4, 6]
size 1 count == 8
size 2 count == 5
size 6 count == 1
size 8 count == 1
```

[algorithm help](#)

chopping up a string with a scanner

```
Scanner c = new Scanner( "2 3 3 4" );
while( c.hasNextInt() )
{
    System.out.println( c.nextInt() );
}
```