

Lab Goal : This lab was designed to teach you more about the ArrayList class.

Lab Description : Write a program to create a histogram. A histogram keeps track of the occurrences of data. You will have two ArrayLists. One will store the keys or the letters. The other will store the values or the counts of the letters. This is very similar in logic to a Map.

The histogram will receive a list of items to count and a data file name of the file to analyze.

Sample Output :

```
search letters = [a, b, c]
Letter occurring most : a
Letter occurring least : b
```

```
lab20c1.dat
[a, b, c]
[7, 1, 1]
```

```
search letters = [d, e, a]
Letter occurring most : d
Letter occurring least : d
```

```
lab20c2.dat
[d, e, a]
[4, 4, 4]
```

```
search letters = [x, a, r, g]
Letter occurring most : a
Letter occurring least : x
```

```
lab20c3.dat
[x, a, r, g]
[4, 13, 8, 5]
```

Sample Data lab04c1.dat :

```
i went to the store
hello world
i am sam i am
funny how this program works
arraylist is the best class ever
```

Sample Data lab04c2.dat :

```
a a a a
b b b b
c c c c
d d d d
e e e e
```

Sample Data lab04c3.dat :

```
abcdefghijklmnopqrstuvwxyz
abcdefghijklmnopqrstuvwxyz
abcdefghijklmnopqrstuvwxyz
abcdefghijklmnopqrstuvwxyz
hello world hello world
a b a c
freddy fast fingers
a a a a a a
```