Quiz 5

Data Structures – NYU

Name: _____ **NetID:** _____

Question:

Write a method

```
static <E> Map<E, Integer> counter(PositionList<E> list)
```

that returns a map such that `map.get(elem)` returns the number of times `elem` appears in `list`. Use `UnsortedMap` as your map.

If n is the number of elements in the list, and m is the number of unique elements of the list, what is the worst-case asymptotic computational complexity of `counter`?

Example:

Suppose the list is:

$$L = [A, B, A, C, B, A]$$

Then the resulting map should be:

$$\{A \to 3,\ B \to 2,\ C \to 1\}$$

End of Quiz 5