

array counter

If we have the problem of counting the number of 1 letter words, 2 letter words, 3 letter words, etc., in a file, we would need numerous counters, basically one counter for each word size. To make the counters easier to work with we create an array counter (really we are going to use a vector counter). For the example listed, lets say we are going to count up to 20 letter words. Our counter would look like:

```
apvector<int> counter(22);
```

The first slot in the vector, 0 length words, is not used, therefore we can stored the exact length of the word in the corresponding index. I also made an extra location, index 21. This extra location will count words that have more than 20 letters. Here is how it might be used.

```
apstring word;
cin >> word;
int x = word.length();
if (x <= 20)
    counter[x]++; // Increment the counter for word length x
else
    counter[21]++; // Increment counter for words over 20 letters
```

We could get fancy and resize the vector if we find a word more than 20 letters long, but that sounds like a homework problem or test question.