Counting Algorithms

Often, you'll need to count the number of elements which meet a particular condition. How many negative numbers are in the vector? How many numbers between one and a hundred? How many short words? All those are counting algorithms. Here's some pseudocode that explains the algorithm:

```
counter <- 0
examine each item in the collection
if the item meets the condition then
count the item
```

It takes longer to describe this in English than it does to write it in C++. Here's a loop that **counts the positive numbers** in a **vector** named **v**:

```
int positive{0};
for (auto e : v)
{
   if (e > 0) ++positive;
}
```



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