Naive Bayes
Operator Overloading
Operator Overloading

“You will be using file streams to read from the provided data files, and you will need to overload std::istream &operator>> to support reading in the set of training images. As a reminder, the reason why we prefer overloading >> rather than just creating a method that accepts the filename string as a parameter is that it's more flexible. With this design, you should be able to support receiving data from arbitrary sources, like network connections, although that's not something you have to worry about for this assignment.

When implementing this section, keep in mind that you'll need to be able to support arbitrary image sizes.”
Two Points

1. you will need to overload std::istream &operator>> to support reading in the set of training images.
2. When implementing this section, keep in mind that you’ll need to be able to support arbitrary image sizes.
Operator Overloading

Here is an example*. What does this do?

```cpp
friend istream &operator>>( istream &input, Distance &D ) {
    input >> D.feet >> D.inches;
    return input;
}
```

Notice the line of implementation allows multiple fields to be extracted from one line to directly populate fields in the class. We are only interested in one string of data per line.

*https://www.tutorialspoint.com/cplusplus/input_output_operators_overloading.htm
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Use `getline()`!!

The example shows reading multiple values from a single line using """" which is the same as "next". In our assignment, we want to read the entire line and treat it as an entire string of characters including the spaces.

To do this properly, use `getline()`.

Otherwise, you will get what is on the line WITHOUT the spaces.
Following the Example

Here you will find another example of populating a class with data from a stream. It includes a use case.

Reading Data from a File in C++ and Overloading “>>”

You should look at these. They will give you more than we talked about this morning.


http://www.cplusplus.com/forum/beginner/207845/


