

# COL 106 Lecture 17

## Streams

$\gg$  ,  $\ll$

e.g. count words

getline (iss, line)

(iss >> i)  
expression of hyps driving  
with side-effects

for (i)  
expression  
with  
side effects

## Uninitialized variables

many online compilers:  
initialize to zero

string -> state (s)

rip

```
isrinputstream  input(s);  
string line;  
while (getline(input, line))  
{
```

```
input >> word X  
isrinputstream lstream(line);  
word  
count_words(lstream);  
}
```

}

File I/O

Files?

#include <fstream>

#include "filelib.h"

Creating a file and closing it

OutputStream

infile;

count the number of chars  
in a file

infile.get(1 char &c)

expression

to indicate success/failure

```
char c;  
int numchars = 0;  
while  
string s = "File.txt";  
  
ifstream infile;  
  
if (infile.open(s))  
{  
    while (infile.get(c))  
    {  
        numchars++;  
    }  
    infile.close();  
}  
return numchars;
```

## Count the # lines

```
{
    int main()
    {
        ifstream infile;
        int numlines = 0;
        infile.open("File.txt");

        while (getline (infile, line))
        {
            numlines++;
        }

        infile.close();
        cout << numlines;
        return 0;
    }
}
```