Review

- What data files make good test cases for the current project? Why?

- Read a file of ints until you find 999. Display the sum of the previous ints.

Files Continued

section 5.9 & 12.5

Reading Until the EOF

- It is possible to read from a file until the end is reached

```
while (inputFile >> num)

{

    cout << num << " ";

}
```

Reading from a File

- Write a program that will read in a sequence of numbers (double) from a file and calculate the sum.

Reading Characters

- Write a program that reads in some text from a file and outputs that text to the screen

- The file contains:

Hello Everyone!

I'm a file that

contains some text.

Solution

```
ifstream inputFile;
char letter;

inputFile.open("letters.txt");
if (!inputFile)
{
    cout << "*** Error opening file" << endl;
    exit(-1);
}


while (inputFile >> letter)
{
    cout << letter;
}
cout << endl;
inputFile.close();
```

The Output

`HelloEveryone!I'mafilethatcontainssometext.`

- What's happened?!

- All spaces, tabs, and new lines have been ignored.

- This is because >> only reads visible characters

- How can we read all characters so that the output looks exactly like the input

Solution

```cpp
ifstream inputFile;
char letter;

inputFile.open("letters.dat");
if (!inputFile)
{
    cout << "*** Error opening file" << endl;
    exit(-1);
}


while (inputFile.get(letter))
{
    cout << letter;
}
cout << endl;
inputFile.close();
```

Practice

- Write a program that counts the number of characters (including whitespaces) that are in an input file ("story.txt").

- Write a program that counts the number of words in an input file ("story.txt").

Practice

- Read Pacific Soccer scores from a file. Calculate the Pacific team's record.

- How long is their longest winning streak?

Pacific 5 NorthwestChristian 0
Redlands 2 Pacific 1
LaVerne 0 Pacific 6
.....
Pacific 1 PacificLutheran 0

The home team is listed first.

No team name contains a space.