

Files Continued

Reading Until the EOF

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

```
while (inputFile >> num)
{
    cout << num << " ";
}
```

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Reading from a File

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

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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.

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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();
```

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The Output

HelloEveryone!I'mafilethatcontainsometext.

- 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

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Solution

```

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();

```

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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.

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