

# Notes from Lab

**Test** your foundational classes first

if your Stack/Queue didn't work,  
nothing else COULD

**Debug**

Set breakpoints and look at variable values

Where/when do things go bad

Stop staring at the code - run it!

*if you could LOOK at it and find the error, you probably wouldn't have  
made the error in the first place*

1

# Files and Arrays

Reading from files into structures

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# Files and arrays

Processing a file:

Do you need the data more than once?  
or can you just process and move on?

Read a file of values and find largest?

Read a file of values and find average?

Storing the data

Usually some sort of array

Remember - arrays are fixed length...

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# Files and Arrays

Initializing a student phonebook with names and  
numbers of each student?

Plan A (not good)

```
String[ ] names;
```

```
String[ ] phone;
```

"Parallel" arrays - not good!

Plan B (preferred)

```
Class Student
```

```
StudentInfo[ ] student;
```

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# Files

Read text file of x,y into coordinates for use in  
setting up a "map" based game

Read text file of names and grades  
for various statistical analysis (*Average, Median, Std Dev*)

Read and plot hurricane tracking data

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