

Announcements

- If you didn't get your exam back, please come to the front.
- Project #2 is due tonight at 11:00PM.
- Project #3 will be posted soon (probably Monday)
- Term paper assignment has been posted.

Reminder

- To invoke the “Error Console” in the Chrome browser use:

CTRL-SHFT J on a PC

Command-Option J on a Mac

The Power of Computing

Why do we need computers? Computers are FAST.

To harness this potential we need to be able to REPEAT operations many, many times.

Two techniques for repetition:

- 1. Loops (We will learn next)**
- 2. Recursion (Maybe if we have time)**

While Loops

```
...  
while (...some boolean condition...) {  
    ...  
    ...  
    ...  
}  
...
```

Repeats block of code over and over as long as condition is true.

Note: If condition is *initially* false, then block of code *never* runs.

While Loops

Examples:

- **Counting**
- **BottlesOfPepsi**
- **SquareRootTable**
- **GuessingGame**

Nested Loops

```
...  
while (...) {  
    ...  
    ...  
    while (...) {  
        ...  
        ...  
    }  
    ...  
    ...  
}  
...
```

Nested Loops

Examples:

- **Grid of Asterisks**
- **MultiplicationTable**