CPS 100 - Program Design and Analysis I
Dr. Susan Rodger
Section: Overview
(handout)

Read Chap. 1, 6.4 for next time.

Syllabus

- office hours/help
- text/reading
- programs/computing/collaboration
- newsgroup/web
- grading
- schedule

Areas of Computer Science

- theory
- artificial intelligence
- networking
- systems
- information processing

Tools, Methods, Issues

- Sorting
- Searching
- Data Structures
- Efficiency
- Correctness

Implementation

Fortran	Spitball
PL/1	Ada
Pascal	Lisp
C	FP
C++	APL
Java	Unix

The programming language C++

- invented by Bjarne Stroustrup, mid 80's
- object-oriented programming (OOP)
- abstraction

Example Problem - Sending Email

Send email to jones@cs.washington.edu

University of Washington	$\Leftarrow$	$\Leftarrow$	Duke University

Example Problem - Transfering Data

You need to transfer a large amount of data over the phone line from your company in NC to the European site in Germany.

Problem Precision Integer Arithmetic

Compute 412^{516}

```
class BigInt
{

    public:


    private:

}
```