

Welcome to CS 280!

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Course goals

Produce well-rounded computer scientists who can:

- ▶ Categorize well-known, classic problems
- ▶ Work effectively in small teams to solve

Additional benefits

- ▶ Increase your programming skills
- ▶ Help you prepare for job interviews

Our ulterior motive

- ▶ Prepare teams for upcoming contests!

Weekly schedule

Before class

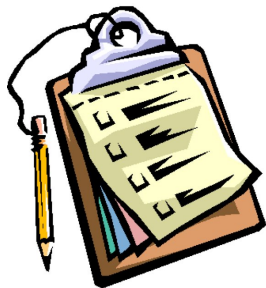
- ▶ Read the textbook, etc.

During class

- ▶ Discuss concepts (30 min)
- ▶ **Live contest! (75–90 min)**
- ▶ Debrief / discuss solutions

After class

- ▶ Complete solution, add to portfolio
- ▶ Practice and submit other problems



Grade requirements

Participation 50%

- ▶ Weekly programming contests
- ▶ Individual prep and practice

Portfolio 50%

- ▶ Top 10 problems solved
- ▶ Difficulty and variety

Other credit

- ▶ UVa problems solved outside class
- ▶ Does not make up for being absent



Today's Skill

Testing from the command line

I/O redirection

Never test your code interactively!

- ▶ Time consuming
- ▶ Error prone
- ▶ Hard to redo

Instead

1. Create `sample.in` and `sample.out` files
2. `java Main < sample.in > Main.out`
3. `diff sample.out Main.out`

Let's see how you did...

Today's Contest

Here we go!

Contest logistics

All programs use standard in/out

- ▶ Don't need to validate the input
- ▶ Read until EOF or special value

Example judging responses:

- ▶ Correct :-)
- ▶ Wrong Answer / Output Format Error
- ▶ Incomplete Output / Excessive Output
- ▶ Run-Time Error / Time-Limit Exceeded

Ranking

- ▶ Number of problems solved
- ▶ How many minutes it took