REACTO

(Whiteboard) problem solving technique

LOGISTICS

(evening 6:30–7:30pm, Saturday 9-10am)

- Random pairs of ‘interviewer’ and ‘candidate’
- Interviewers study problem night before
- IA presents problem to interviewers — *15 min*
- "Interview" time — *30 min*
- Problem solution/review — *15 min*

WHITEBOARD

- Technical interviews often involve a whiteboard (or an autocomplete-free text editor like Google Docs)
- Why?

PROBLEM SOLVING

- Identify the problem
- Brainstorm solutions
- Implement one
- Evaluate it

R estate

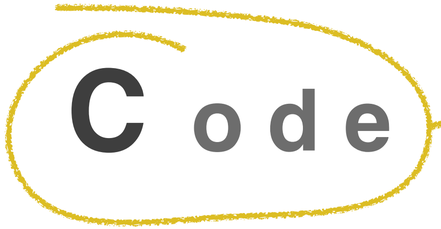
E xamples

A pproach

C ode

T est

O ptimize



Notice how far down this is

RESTATE

- Rephrase in your own words (diagram if useful)
- And/Or ask questions
- Keep going until you understand the problem
- Leads very naturally into…

EXAMPLES

- Representative input and output
- Consider edge cases
- Consider errors
- Write them down

APPROACH

- **Come up with at least one *conceptual* solution**
  - identify pros and cons
  - make simple, broad optimization choices here
- **Don’t code!**
- **Show you can communicate**
- **Use this time to plan (crucial)**

CODE

- Start at top left (if whiteboard)
- Write small
- Minimal indenting
- Minimal line spacing
- Breadth first

TEST

- Use Examples
- Be the machine
- Leads into…

OPTIMIZE

- **How is it now?**
- **Count the steps (maybe during Tests)**
- **Consider the “space” necessary**
- **Consider time complexity (big O)**
  - efficiency of an algorithm
  - performance at scale.
- **How could it be more optimal?**

FINAL THOUGHTS

- Think of the interviewer as a collaborator
- Enjoy it!