

# Computer Science I

## Debugging

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1. Introduction
2. Demonstration

# Part I: Introduction

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- Demonstration of a *debugger*

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- Even worse: blind coding, aimlessly changing things with not thought

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- Fix it, test it (and regression test it), document it

# Part II: Demonstration

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- GNU Debugger (gdb)

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- Can also set in GDB

# Useful GDB Commands

- Refresh the display: `refresh` (or control-L)
- Run your program: `run`
- See your code: `layout next`
- Set a break point: `break POINT`, can be a line number, function name, etc.
- Step: `next` (`n` for short)
- Continue (to next break point): `continue`
- Print a variable's value: `print VARIABLE`
- Print an array: `print *arr@len`
- Watch a variable for changes: `watch VARIABLE`

## Demonstration