

CSE 331: Interactive Programs

(From last time) How to signal a problem to your client:

- Special value (part of existing return type): null, -1, 0, NaN, etc.
 - Pros/cons: Simple, but easy to forget to check for.
- Wrap the return type: boolean instead of void, `Optional<T>` / `OptionalInt`.
 - Pros/cons: Inconvenient for the caller if they “know” the problem can’t happen.
- Throw an unchecked exception (`extends RuntimeException`).
 - Pros/cons: Good for truly unusual situations, like out of memory.
- Throw a checked exception (`extends Exception`).
 - Pros/cons: Good for “expected” problems, like file-not-found.

Batch vs Interactive

- *Batch processing* means a program that reads inputs, computes, produces outputs, and exits.
- Most programs you use are not like this! Most programs run forever (until told to stop).
 - Examples: