Thought

"Programming is the art of doing one thing at a time"
– Michael Feathers

`https://twitter.com/codewisdom/status/1092416737281224704?s=11`

1 Live Coding of Linked Lists

1. Simple implementation – one file
2. Separate file implementation – three files
3. Class implementation – three files

1.1 Example: Simple List Implementation

All code in a file named `list1.cpp`.

- Node structure
- `head`
- `main()`
- Functions:
  `AddToFront()`
  `DeleteFirst()`
  `PrintList()`

Compile: `g++ list1.cpp`

1.2 Example: Separate file Implementation

Break implementation into three files:

- `testList.cpp`
  `head`
  `main()`
- `list.cpp`
  `extern head`
  Functions
- `list.h`
  Node structure
  Prototypes

Compile: `g++ testList.cpp list.cpp`

1.3 Example: Class implementation of List

Modify code to use `List` objects:

- Add `List` class interface to `list.h`
- Add a `List` object to `testList.cpp`
- Add `List::` to functions (methods) in `list.cpp`

Compile: `g++ testList.cpp list.cpp`

Note: `list.cpp` now contains the implementation of the list class defined in `list.h`.