

What is the LC-3 Calling Convention for R0 through R3?

What about R0 through R3?

Remember: compilers must

- **systematically generate assembly** from **C**
- in a way that matches other compilers' code.

Are **R0**, **R1**, **R2**, and **R3**

- caller-saved, or
- callee-saved?

What is the calling convention?

Assume that R0 through R3 are Caller-Saved

I'm not sure.

I couldn't find it in the book.

There was once an LC-3 **C** compiler.

I think R0-R3 were callee-saved.

However, for our class, we will assume:

R0-R3 are caller-saved.

Summary of Static Storage Class

Static variables

- part of program's image on disk
- (so can be initialized with bits: 0 by default),
- stored in global data area, and
- persist for lifetime of program.

Summary of Automatic Storage Class

Automatic variables

- created as part of a function's stack frame,
- start as bits
- (can optionally be initialized by code), and
- destroyed when stack frame is popped (end of function execution).