



CS 4120
Introduction to Compilers

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Lecture 19: Calling Conventions

Caller-save vs. callee-save

Good solution:
make some caller-save
make some callee-save
be consistent!

Pass by register or stack

6 registers for arguments
additional args go on stack
your choice!

Frame vs. stack pointer



Stack Alignment

`rsp` needs to be
16-byte aligned when
you run call instruction
challenge: call stores `rip` on
stack, thereby
misaligning it

Calling Process (x64)

