

Lecture 8: Control flow, stacks

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Control flow!

- ▶ Control flow:
 - ▶ Decisions (if/then, switch)
 - ▶ Loops (for, while)
 - ▶ Subroutines (a.k.a. functions)

Decisions and loops

Condition codes

TODO

Comparing values

TODO (cmp and test instructions)

set instructions

TODO

Conditional jump instructions

TODO

Jump instruction encodings

TODO

Implementing decisions (if, if/else)

TODO

Implementing decisions (switch)

TODO

Implementing loops

TODO

Conditional move instructions

TODO

Subroutines

Subroutines

Subroutines (a.k.a. functions, procedures), the most important abstraction in programming

The call stack

TODO

TODO

Calling conventions

TODO

Passing and receiving parameters

TODO

TODO