

# 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