• 2
  – Bitwise operations
  – Integer representations and arithmetic
  – Floating point representations

• 3
  – Machine-Level Code
  – Accessing memory
  – Operators (Logical and Arithmetic)
  – Control
  – Procedures & Stacks
  – Arrays, structures, and Unions

  Gates
  Simple Circuits
  Circuit simplifications
  Simple memory

4
  Y86
  HCL
  SEQ
  PIPE

5
  Reducing Loop overhead
  Loop unrolling
  Inlining
  Accumulators & Reassociations

6
  Locality
  Memory Hierarchy
  Caching
  Cache-friendly code