Introduction: Hello, World Below

Tom Kelliher, CS 220

From Tetris to Nand, Slides

- Slide 5: Name two purposes of an abstract interface.

- Slide 7: What is the purpose of a library (OS method)?

  Describe an example of a library.

- Slide 9: Is a virtual machine restricted to a single high-level language?

  Relate this model to a Linux system with C, C++, FORTRAN, and Ada compilers.

- Slide 11: The virtual machine uses what architecture?

  What is the pre-condition for executing an `add` instruction?

- Slide 14: Distinguish the location of a variable from its value.

  In the assignment `sp = sp + 1`, which is the value reference and which is the location reference?

  Relate array usage to the notions of location and value.

- Slide 15: Distinguish machine language from assembly language.

  If I open a machine language file in an editor, what will I see?

- Slide 17: What part of a processor parses instructions?

  What part of a processor executes instructions?

- Slide 18: Distinguish architecture from organization.

  Describe three aspects of a processor's architecture.

Describe three aspects of a processor's organization.

- Slide 20: Distinguish between combinational and sequential logic.

- Slide 21: What is the difference between OR and XOR?

- Slide 23: Why do we say that the NAND gate is complete?

- No slide: Could we treat the virtual machine language as a machine language and build the virtual machine from gates?