Introduction

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1 Administrivia

Announcements

Assignment

Read 1.1–1.9, 2.1–2.4.

Outline

1. Syllabus.

2. Introduction: compilation, layered design, computer system components, history.

Coming Up

Performance metrics.

2 Introduction

Compilation process:
1. HLL and compiler.

2. Assembly and assembler.
   One-to-one correspondence to machine code (usually).


Layered system design:

1. Hardware.

2. Operating system.

3. System software.

4. Application software.

5. User.

Components of a computer:

1. Input, output.

2. Memory.

3. Control, datapath. (Processor)

A little history:

1. What was a computer? Why did some dream of mechanized computers?


3. Eckert and Mauchly: ENIAC.
   Total market for electronic computers. Application areas?
   Census.


6. DEC PDP-8.

7. CDC and Cray: supercomputing.


12. Intel x86.