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Content

1. Logic Model
2. From Hardware to Software
3. Deal with symbols-Two main passes
4. Translation to Machine Code

Logic Model

Background: we encounter our first software practice: building an assembler for Hack machine language

Goal: build the assembler for Hack computer using a high-level programming language

Input: nand2tetris reference, language specification material, e.g., Mathematica reference

Output: learn the basic procedure of dealing with string and text and how to build an assembler for certain platform.

Process:

1. learn the specification of Hack machine language and assembly language
2. learn the specification of a high-level language and corresponding libraries or functions to deal with string and text.
3. implement the assembler.

Effects: know exactly how to build an assembler for a specific hardware implementation. **Outside**

factors: We don't need to build an assembler using machine code. Carrying the building process on another computer is OK.