



Dealing w/ labels + variables in Hack assembler?

- Pre-populate symbol table w/ built-in symbols (SCREEN, KBD, PC, ...)
- 1st pass:
 - (LABEL) — store in symbol table w/ cur. instr #.
 - @name — store name in a list/set of names. — add it to list of instructions
 - anything else — increment instr counter, add to list of instr.
- Now go through set of names.
 - If name already in symbol table, ignore.
 - Otherwise, assign it the next available memory address + add it to the symbol table.
- 2nd pass:
 - translate each instruction
 - translate A-instructions by looking up in symbol table.