

Hack Assembly Language Compiler

- What is Hack Assembly?
 - There are some documents on the internet.
 - [Introduction to Hack Assembly Language](#)
 - [Assembly Language Tricks for the HACK computer](#)
- This is a simple compiler that can compile from JLang to Hack Assembly.
- This compiler implements these functions:
 - assembly optimization
 - dead code elimination
 - operation combine
 - duplicate operation elimination
 - stack frame
 - return address
 - function arguments
 - return value
 - loop & conditions
 - with variable life cycle in a block.
 - builtin library
 - output
 - draw rectangle
 - draw number
 - draw chars
 - clear screen
 - input
 - read keys
 - math
 - abs
 - lowbit
 - xor
 - multiply
 - divide
 - mod
 - min
 - max
 - memory
 - allocate
 - free