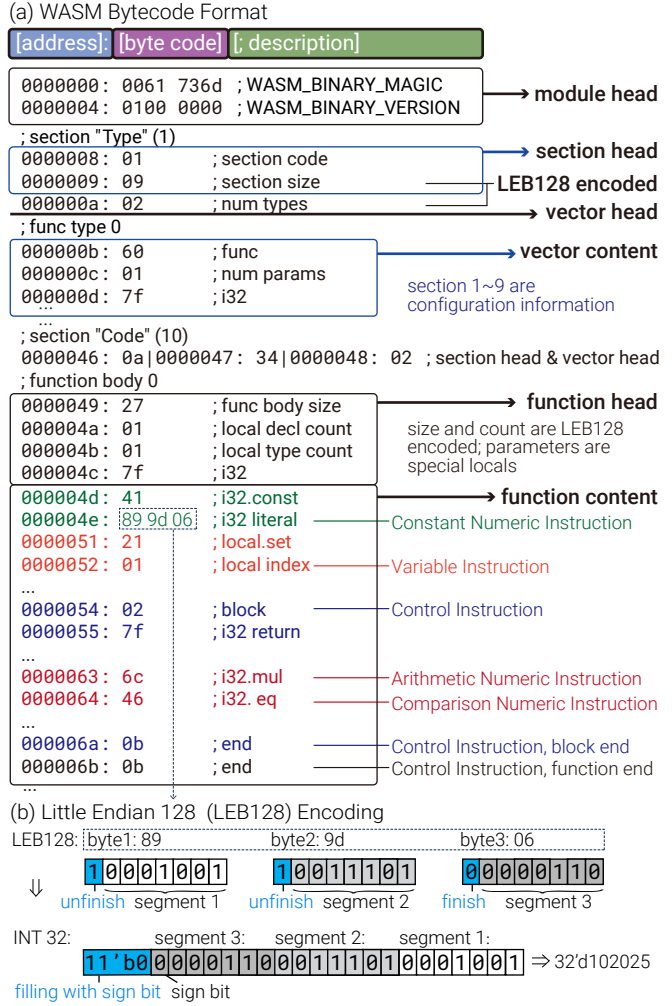
(a) WASM Bytecode Format
[address]: [byte code] [; description]
0000000: 0061 736d ; WASM_BINARY_MAGIC
0000004: 0100 0000 ; WASM_BINARY_VERSION
module head
; section "Type" (1)
0000008: 01 ; section code
0000009: 09 ; section size
section head
LEB128 encoded
000000a: 02 ; num types
vector head
; func type 0
000000b: 60 ; func
000000c: 01 ; num params
000000d: 7f ; i32
vector content
section 1~9 are configuration information
; section "Code" (10)
0000046: 0a|0000047: 34|0000048: 02 ; section head & vector head
; function body 0
0000049: 27 ; func body size
000004a: 01 ; local decl count
000004b: 01 ; local type count
000004c: 7f ; i32
function head
size and count are LEB128 encoded; parameters are special locals
000004d: 41 ; i32.const
000004e: 89 9d 06 ; i32 literal
0000051: 21 ; local.set
0000052: 01 ; local index
0000054: 02 ; block
0000055: 7f ; i32 return
0000063: 6c ; i32.mul
0000064: 46 ; i32. eq
000006a: 0b ; end
000006b: 0b ; end
function content
Constant Numeric Instruction
Variable Instruction
Control Instruction
Arithmetic Numeric Instruction
Comparison Numeric Instruction
Control Instruction, block end
Control Instruction, function end
(b) Little Endian 128 (LEB128) Encoding
LEB128: byte1: 89 byte2: 9d byte3: 06
1 0 0 0 1 0 0 1
unfinish segment 1
1 0 0 1 1 1 0 1
unfinish segment 2
0 0 0 0 0 1 1 0
finish segment 3
INT 32:
segment 3: segment 2: segment 1:
11'b0 0 0 0 0 1 1 0 0 0 1 1 1 0 1 0 0 0 1 0 0 1
⇒ 32'd102025
filling with sign bit
sign bit