

Load Variable `num` into R0

LDR R0,R5,#4

Load `num` into R0.

Is there an LC-3 instruction for that?

scope	identifier	type	from	offset	...
translate.c	the_number	int32_t	R4	0	...
find_abs	abs_value	int32_t	R5	0	...
find_abs	num	int32_t	R5	4	...

Check the Sign of Parameter `num`

LDR R0,R5,#4
BRn ELSE_COND

Branch on false
(`num < 0`)

ELSE_COND

Is there an LC-3 instruction for that?

What are the condition codes?

Test is True, So Expression Value is `num`

`abs_value = (0 <= num ? num : -num);`

The test is true: **expression's value** is `num`.

Where is `num`?

Look in the symbol table!

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ELSE_COND

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