

## Load Variable `abs_value` into R0

LDR R0,R5,#0

Load `abs_value`  
into R0.

Is there an LC-3  
instruction for that?

scope	identifier	type	from	offset	...
<code>translate.c</code>	<code>the number</code>	<code>int32_t</code>	R4	0	...
<code>find_abs</code>	<code>abs_value</code>	<code>int32_t</code>	R5	0	...
<code>find_abs</code>	<code>num</code>	<code>int32_t</code>	R5	4	...

## Where is the Return Value Stored?

Where does the return value go?

Look in the stack frame!

R5, R6 →	local var. ( <code>abs_value</code> )	R5+0
	previous frame pointer	R5+1
	return address	R5+2
R5 + 3	return value	R5+3
	parameters ( <code>num</code> )	R5+4
	main's stack frame	

## Store R0 in Return Value Slot of Stack Frame

LDR R0,R5,#0  
STR R0,R5,#3

Store R0 into  
return value slot.

Is there an LC-3  
instruction for that?

## We Have Translated the Code for `find_abs`!

LDR R0,R5,#0  
STR R0,R5,#3

The statement  
is complete!

`return abs_value;`