

A C Function to Find Absolute Value

Here's the function.

```
int32_t find_abs (int32_t num)
{
    int32_t abs_value;
    abs_value = (0 <= num ?
                num : -num);
    return abs_value;
}
```

our function signature

conditional construct using conditional operator

Using `find_abs` Function in C

Also in the program `translate.c` (see web page for full version):

```
static int32_t the_number;

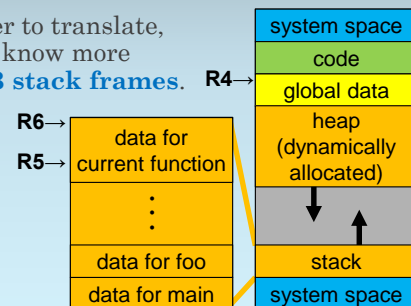
// ... and inside main ...
the_number = find_abs (the_number);
```

file scope variable

We will translate this function call first.

First, We Must Learn About Stack Frames in LC-3

But in order to translate, we need to know more about **LC-3 stack frames**.



LC-3 Stack Frames Contain Five Elements

Remember what's in a stack frame?

This is the order on the stack...

```
Local variables
Address of caller's stack frame
Return address (R7 in LC-3)
Outputs (return value)
Inputs (parameters, arguments)
```

these form the linkage

Why are parameters on the bottom?