

OX **BARE**
CB **METAL**

Where are we?

A guide to finding your place in a program

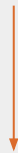
```
main:
    BL    stdio_init_all
    LDR    R1, =main
print:
    LDR    R0, =fmt
    BL    printf

.data
    fmt:  .asciz "%x\n"
```

The program counter

Register: PC

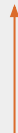
A real place in memory



main:

BL `stdio_init_all`

LDR `R1, =main`



The very same real place

The program counter

Register: PC

The PC register here...

main:

BL

stdio_init_all

LDR

R1, =main

...equals R1's value here

Arrays

main:

BL stdio_init_all

LDR R1, =values

LDR R2, =end

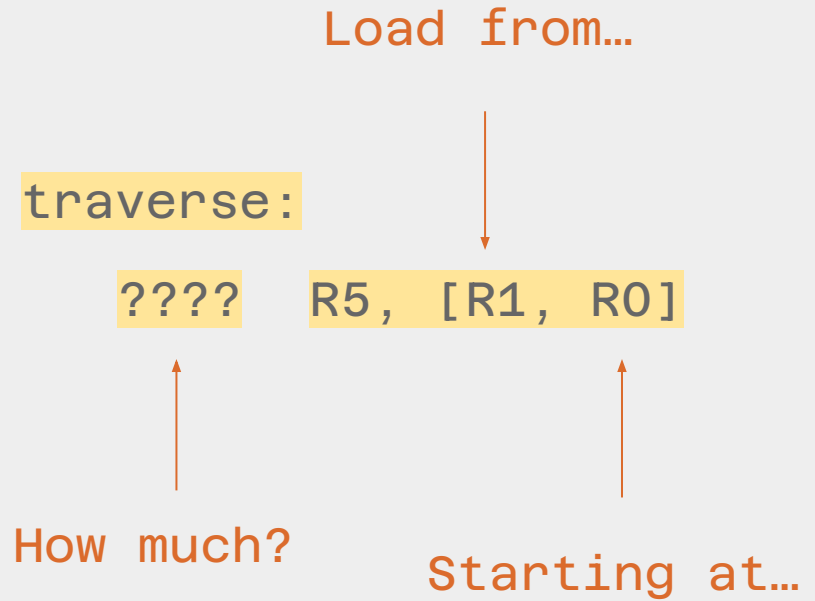
SUB R3, R2, R1



What is this value?

Arrays

Indirect addressing
with an offset



CMP

R_M , R_N

B

LOCATION

EQ

LT

GT

...and many more