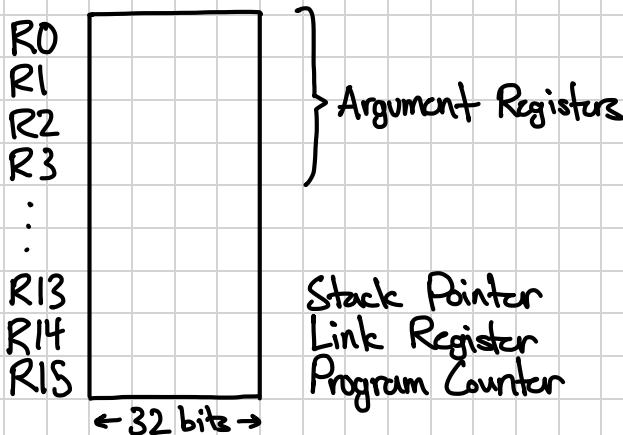


REGISTERS



INSTRUCTIONS

Data movement

- ① $R_{reg} \leftarrow \text{Constant}$ (in MEM or immediate)
- ② $R_{reg} \leftarrow \text{RAM}$ (load LDR)
- ③ $R_{reg} \rightarrow \text{RAM}$ (store STR)

$R0 \leftarrow 42$

`MOVW R0, #42` $\xrightarrow{\text{imm 8-bit unsigned (0-255)}}$

$R1 \leftarrow 100,000$

`LDR R1, =100000` $\xrightarrow{\text{0x Hex}}$
`LDR R2, =0xfee0` $\xrightarrow{\text{0c Octal}}$
`LDR R3, =-5500` $\xrightarrow{\text{0b Binary}}$

MEMORY

V1: long 0x12345678

.long 32 bit
.short 16 bit
.byte 8 bit

LDR R0, =V1 — LEA-like

LDR R1, [R0]