



Arithmetic: ADD/SUB/... DIV/MUL, LOGICAL

Memory: LD/ST

LD R7, ADD
ST ADD, R7



High-level Prog LANG

```
if a == 0
  A
else
  B
```

COMPILER

```
ADD
SUB ..
10111 -- 11
```

ASSEMBLER

ASM

```

→ LD R2, A
  cmp R1, R2, 0 // R1 ← R2 == 0
  JNP 0 R1, L1
  B ...
  JMP L2
L1: A
    .
L2:
    |||||
  
```

R1
for (i=0; i<10; i++)

```

Loop:
    |||||
    .
    cmp R1, 10
    jump Loop
  
```





