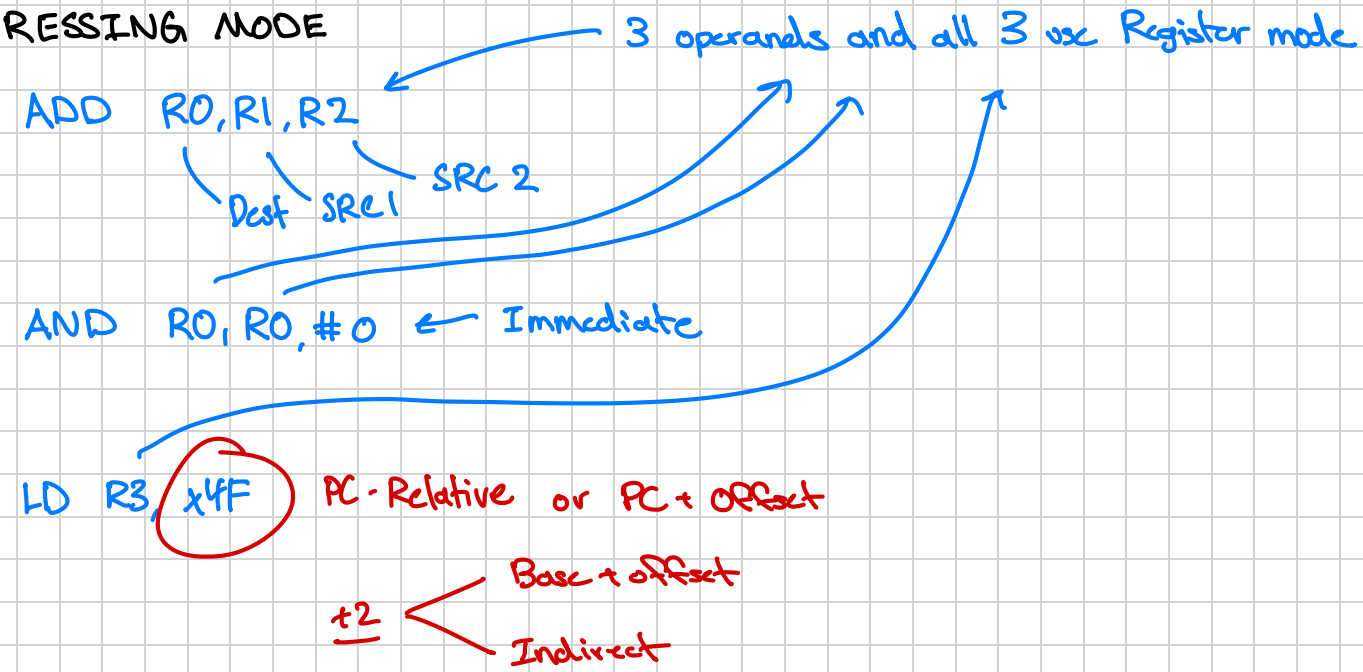
ADRESSING MODE



PS ∅ compute 3 + 2 + 1 and store @ M[x3050]

```
        .ORIG x3000
00      AND R0, R0, #0
01      ADD R0, R0, #3
02      ADD R0, R0, #2
03      ADD R0, R0, #1
04      ST  R0, x4B
        TRAP x25  ≡ HALT
        .END
        .ORIG x3050
        .BLKW #1
        .END
```

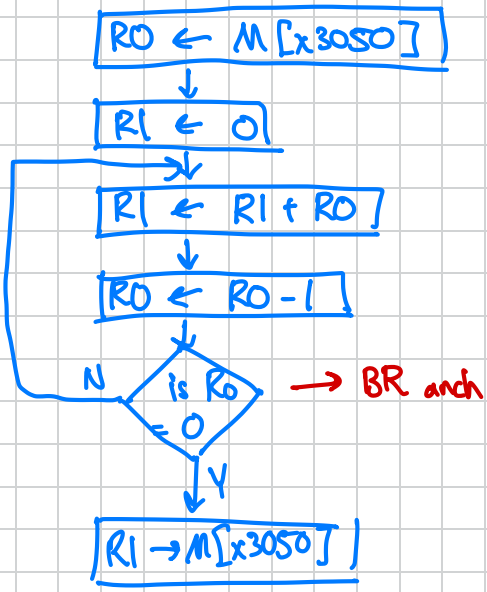
PS 1 Compute N + (N-1) + (N-2)

Sum =

N is @ x3050 Sum is @ x3051

Algorithm

1. get N into (R0)
2. Set sum = 0 (R1)
3. Sum = Sum + R0
4. Decrement (R0)
5. If R0 is nonzero then go back to 3
6. Store R1 to x3051



→ BR and

```
        .ORIG  x3000
00      LD  R0, x4F
01      AND R1, R1, #0
02      ADD R1, R1, R0
03      ADD R0, R0, #-1
04      BRnp #-3
05      ST  R1, x4B
        HALT
        .END
```

BR Z ⇒ Z = 1

BR NP ⇒ Z ≠ 1