```
Var x
Begin < Input x ;
Loop [ x >= 0 ]  // or If
Begin
      Output x ;
  End  x : x - 1 ;
End
```

IF in assembly
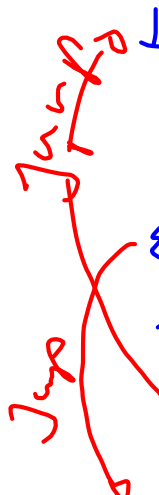
1. Evaluate cond
   - Left - Right
   - Result is in ACC

2. Jump below if cond False
3. Execute the cond. stat
4. Jump position

```
READ x
LOAD x
SUB 5
BRZPOS out
LOAD 0
SUB x
STORE x
out: NOOP
WRITE x
STOP
x 0
```

Nov 15-3:00 PM

Loop in asm

1. Test condition
   - Left — Right
   - Result in ACC

2. Jump below on False

3. Execute loop stat (S)

4. Jump above unconditional

5. Jump below position

Nov 15-2:38 PM

```
READ x
above: LOAD x
SUB 0
BRNEG out
WRITE x
LOAD x
SUB 1
STORE x
BR above
out: NOOP
STOP
x 0
```