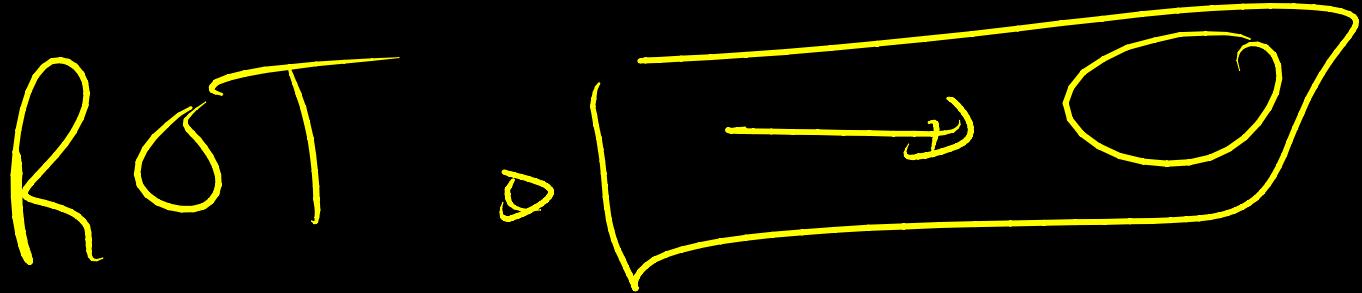


Instruction Variations

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CS 3410, Spring 2010
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More shifts

DRW



$$A = B + 4 * C$$

ADD w/ shift A, B, 2, C

Condition flags

If ($A < B$) goto L

SLT SBB, D, A, B
BNE BTR D, L
(O,

Condition flags

↓
 [ZF/NZC/AE<>] IF ($A < B$) goto L1
 IF ($A > B$) goto L2
 IF ($A == B$) goto L3

x86
BFM

CMP A, B

BLT

BGT
BEQ

Conditional instructions

top: CMP r3, r4

SUBGT r3, r3, r4

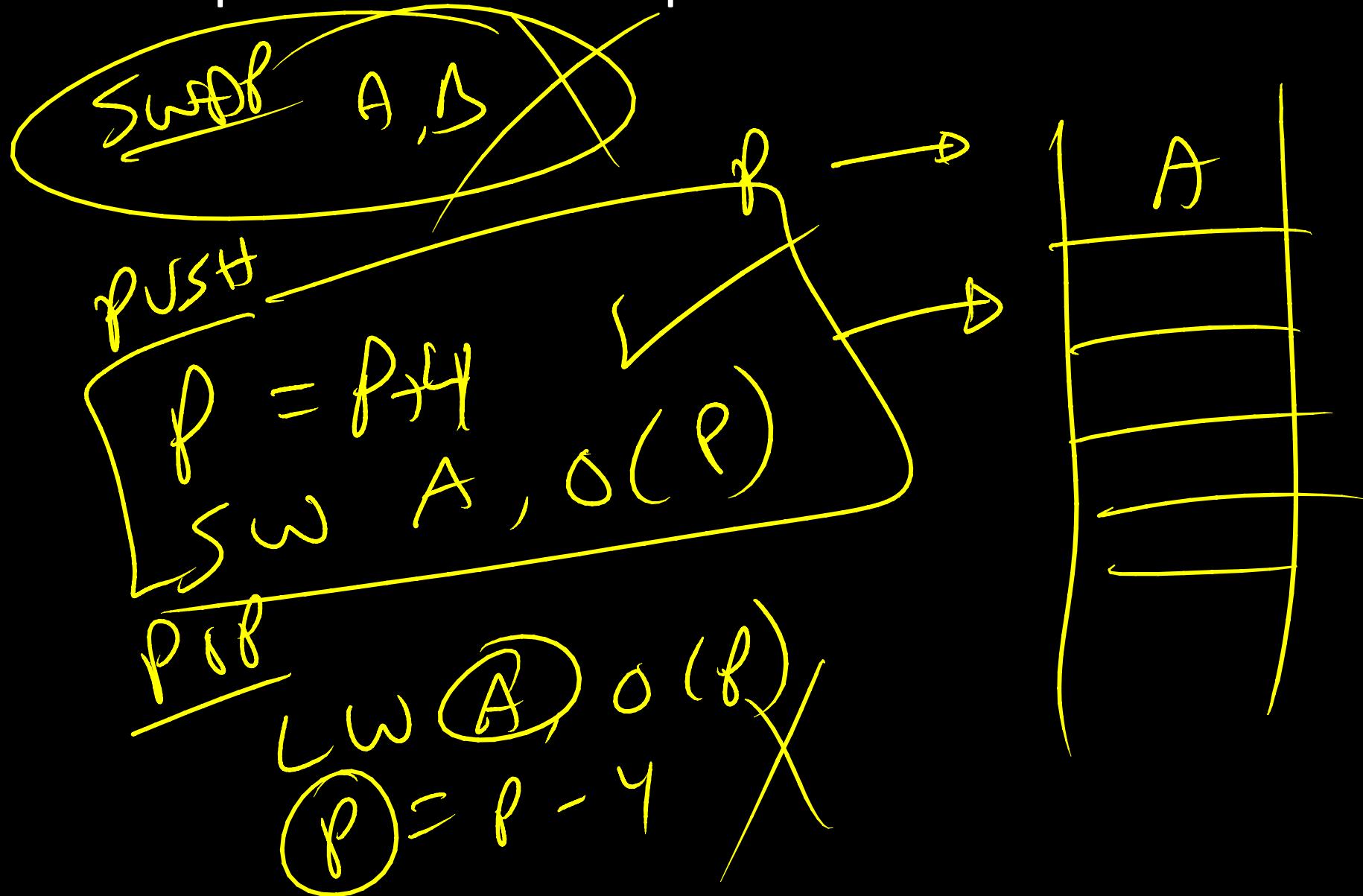
SUBLT r4, r4, r3

BNE top

Af M

Conditional
subtract

Stack operations & multiple destinations



String instructions

MOV AX, FFh

MOV DI, 5000h

MOV CX, 2000h

REP STOSB

|
prefix

AX → Mem DIT CX
Decrement CX

Vector instructions

vaddubs(v3, v1, v2)

vector
add
unsigned
byte
Saturated

