

## Example 1

find machine code for instruction:

add \$s0, \$t0, \$t2

op	rs	rt	rd	shamt	funct
a)	b)	c)	d)	e)	f)

a) op - operation code

b) rs - source register

c) rt - source register

d) rd - destination register

e) shamt - only used for shift operations

f) funct - field for the r-type instruction

## Exercise A:

~~sub~~ sub \$s1, \$s1, \$t5

op	rs	rt	rd	shamt	funct
000000	10001	01101	10001	00000	100010
	13	17	17		

sw \$s4, (\$t8)

op	rs	rt	rd	shamt	funct
101011	11000	10100	10000	0000 0000 0000	
	24	20		1	

lw \$t6, 72(\$s3)

op	rs	rt	rd	shamt	funct
100011	10011	01110	0000 0000 0100 1000		
	19	14		72	

addi \$s7, \$s6, -16

op	rs	rt	rd	shamt	funct
001000	10110	10111	1111 1111 1111 0000		
	22	23		-16	