

2/19/18

A-4

2 b.

2.13

$$2. g = h + A[14];$$

~~LW \$10,14 (\$51)~~

~~add \$ to, t, h~~

Wrong

$$g = h + A[14];$$

LW \$12,56 (\$51)

Add  $\$t_0, t_2, \$t_1$ .

3.  $A[275] = g + A[275];$

LW \$+1, 1100 (\$51)

add \$t1, \$t1, \$t0.

SW \$+1, 1100 (\$51)

$$4. g = h + A[i]$$
$$\#t_0 = t_1 + (\text{Base Adr.} \$s_1 [ \$s_2 ]) \quad \text{---}$$

Add \$t\_2\$, ~~\$t\_2\$~~<sup>\$s\_2\$</sup>, \$s\_2 \# t\_2 \in 2i\$

Add  $\$t_2, \$t_2, t_2 \quad \# t_2 \leq 4i$

Add \$t2, \$t2, \$S1 # t2  $\Leftarrow$  Address of A[i]

LW  $t^3$ ,  $O(t^2)$  ~~#~~  $t^3 \notin A[\lambda]$

Add \$t\_0, \\$t\_1, \\$t\_3 \quad \# \quad g \leq h + A[i]

$$5. \quad X[10] = X[11] + C.$$

LUI \$t1, ~~3b0900~~ 0000 0000 0011 1101 #t1 0000 0000

ORI \$t1, \$t1, 0x0900 # t1 = 003D0900

LW \$12,44 (\$11)

Add \$t\_1, \$t\_2, \$t\_0

SW \$t2, 40(\$t1)

16 | 4000,000

$$16 \overline{) 250,000} - 0$$
$$16 \overline{) 15,625} \quad -0$$
$$\overline{16 \mid 976} - 9$$
$$\begin{array}{r} 16 \overline{) 61} \quad -0 \end{array}$$

16 | 3 -D

0-3

10	11	12	13	14	15
A	B	C	D	E	F

0030/0900

6 - (a)

Instr.

LW  $\$t_0, 1400(\$s_2)$

Add  $\$t_0, \$s_1, \$t_0$

SW  $\$t_0, 1400(\$s_2)$

(b)

85	18	8	1400
0	17	8	8 0 32
43	18	8	1400

(c)

$\Rightarrow$   $\overbrace{100011}^{1400} \overbrace{10010}^{1400} \overbrace{01000}^{1400} \overbrace{000001010111}^{1400} 1000$   
 $\Rightarrow$   $\overbrace{000000}^{1400} \overbrace{10001}^{1400} \overbrace{01000}^{1400} \overbrace{01000}^{1400} \overbrace{000000}^{1400} \overbrace{100000}^{1400}$   
 $\Rightarrow$   $\overbrace{101011}^{1400} \overbrace{10010}^{1400} \overbrace{01000}^{1400} \overbrace{0000}^{1400} \overbrace{01010}^{1400} \overbrace{111000}^{1400}$

d) 8E480578

02284020

AE480578