Homework 2 2.4, 2.14, 2.15

2.4

```
sll $t0, $s0, 2    // $t0 = f * 4
add $t0, $s6, $t0  // $t0 = &A[f]
sll $t1, $s1, 2    // $t1 = g * 4
add $t1, $s7, $t1  // $t1 = &B[g]
lw  $s0, 0($t0)    // f = A[f]
addi $t2, $t0, 4   // $t2 = &A[f+1]
lw  $t0, 0($t2)    // $t0 = A[f+1]
add $t0, $t0, $s0  // $t0 = A[f+1] + A[f]
sw  $t0, 0($t1)    // B[g] = A[f+1] + A[f]
```

f = $s0
g = $s1
h = $s2
i = $s3
j = $s4
Address A = $s6
Address B = $s7

2.14

0000 0010 0001 0000 1000 0000 0010 0000

6 5 5 5 5 6

000000	10000	10000	10000	00000	100000
op	rs	rt	rd	shamt	funct
0	16	16	16	0	32
0	$s0	$s0	$s0	0	add

add $s0, $s0, $s0

2.15

sw $t1, 32($t2)

I-code Instruct (OP 6 bit | RS 5 bit | RT 5 bit | 16 Bit Add)

→ (43 10 9 32)

1010 11 01 010 01 001 0000 0000 0010 0000

Binary	1010 1101 0100 1001 0000 0000 0010 0000
Hex	~~AE49 0020~~ AD490020