**Exercise 1 (part 1)**

2.4

B[g] = A[f] + A[1 + f];

2.5

sll $s0, $s0, 2

sll $s1, $s1, 2

add $t0, $s6, $s0

add $t1, $s7, $s1

lw $s0, 0($t0)

lw $t0, 4($t0)

add $t0, $t0, $s0

sw $t0, 0($t1)

2.6

2.6.1

t = Array[0];

Array[0] = Array[4];

Array[4] = Array[2];

Array[2] = Array[1];

Array[1] = t;

2.6.2

lw $t0, 0($s6)

lw $t1, 16($s6)

sw $t1, 0($s6)

lw $t1, 8($s6)

sw $t1, 16($s6)

lw $t1, 4($s6)

sw $t1, 8($s6)

sw $t0, 0($s6)

2.7

|  |  |  |  |
| --- | --- | --- | --- |
| Little-endian | | Big-endian | |
| Address | Data | Address | Data |
| 0 | 12 | 0 | ab |
| 4 | ef | 4 | cd |
| 8 | cd | 8 | ef |
| 12 | ab | 12 | 12 |

2.9

sll $s2, $s2, 2

sll $s3, $s3, 2

add $t0, $s2, $s6

add $t1, $s3, $s6

lw $t2, 0($t0)

lw $t3, 0($t1)

add $t0, $t2, $t3

sw $t0, 32($s7)

2.10

f = 2 \* (&A);