#1 (2 points) How many basic blocks are in this snippet of MIPS code:

```
addi $s2, $s2, 50
bne $s2, $s1, ThatPlace
sub $t0, $t0, $t4
addi $t4, $t4, -1
j Done
ThatPlace:
sub $t0, $t0, $t5
addi $t5, $t5, -1
Done:
addi $v0, $t0, 0
```

#2 (2 points) How many basic blocks are in this snippet of MIPS code:

```
li    $t6, 1
li    $t7, 4
sw    $t6, theArray($0)
sw    $t6, theArray($t7)
li    $t0, 8
loop:
addi  $t3, $t0, -8
addi  $t4, $t0, -4
lw    $t1, theArray($t3)
lw    $t2, theArray($t4)
add    $t5, $t1, $t2
sw    $t5, theArray($t0)
addi  $t0, $t0, 4
blt    $t0, 160, loop
jr    $ra
```
#3 (6 points, 0.5 points each) Label each of the following instructions as R-type, I-type, J-type, or pseudo-instruction (you should always label some as ‘pseudo-instruction”unless it can be encoded as a single 32-bit MIPS instruction, in which case you should choose R, I, or J based on how it would be encoded):

```mips
bne $t1, $t2, SomePlace
bgt $t1, $t2, SomePlace
addi $t2, $t2, -1
add $t2, $t2, $t4
jal MyFunction
jr $ra
sll $t5, $t5, 12
lw $s1, 8($s0)
lw $s1, 0($s0)
sw $s1, 8($s0)
j Someplace
slt $t5, $t6, $s0
```