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CSE 31 Lab 6 Questions

- 1.) There are 2 problems within this code.
- 2.) To fix the bugs you must change the last 2 values in addiu to 4.
- 3.) The strategy to finding the error was to go through the program step by step and then finding the line where the code would stop. Then look at the data segment and see that it is in increments of 4.
- 4.) The source pointer is stored in \$9
- 5.) The dest pointer is stored in \$10
- 6.) The instruction to load the address of source and dest pointers is "la"
- 7.) The loops starts at line 34 with label L6
- 8.) Instruction: `addu $8,$8,1`
Purpose: increment k
Corresponding C: `k++`;

Instruction: `sll $3,$8,2`

Purpose: find offset value based on k

Instruction: `addu $5,$7,$9`

Purpose: get kth address of source array

Instruction: `lw $4,0($2)`

Purpose: get kth value of source array

Corresponding C: `source[k]`

Instruction: `move $7,$3`

Purpose: save offset

Corresponding C:

Instruction: `lw $3,0($5)`

Purpose: get kth value of source array

Corresponding C:

Instruction: `sw $3,0($6)`

Purpose: load kth value of source into kth value of dest

Corresponding C: `dest[k] = source[k];`

Instruction: `bne $4,$0,$L6`

Purpose: check if the last value was zero

Corresponding C: `source[k]!=0;`

