CSCI-21 Lab #4 due 3/9/16

Please do the first part of this lab by yourself. Please check each other's work AFTER you have both completed it. Then work in groups of two on the program.

Using the shift-and-add algorithm for multiplication from lecture and explained on my Web site, multiply the following. Shift the left-hand operand "right" and the right-hand operand "left". Check your work by multiplying the normal way. Show your work.

`26 * 36`

`54 * 11`

`37 * 16`

`17 * 74`

Write a MIPS program to implement the multiplication by shifting and adding. Get two integers from the user, then multiply using the multiply instruction, and also by using `sll` and `srl` instructions to manipulate the operands to implement the multiply by shift-and-add algorithm. For the second part, do not use multiply or divide instructions. Print both results with some explanatory text (tell me which result is from which type of multiplication).

Check each other's work on the first part. I don't need to see that. Turn in the program the usual way.