Peter Luo

Ori $9, $0, 1 op rs rt constant

001101 01001 00000 0000 0000 0000 0001

Assignment 3:

*Index i reaches size+1 and not size because the code increments the index for the next loop cycle before the statement that checks if the loop is over. Therefore it is incremented preemptively. When i is size, it’ll increment and then it will follow the conditional branch to end the loop.*

*Assignment 4:*

*Importance and value of $v0 in using syscall: The $v0 is used to tell the syscall what type of action it should take. The when using syscall it references $v0 to see what it should do to the value in $a0.*

*Assignment 7:*

*The main function of ex5.asm is to get a number between 0 and 50000 from the user. It divides by two and if there’s a remainder, it goes to Add. In Add, it adds the even half to $t2. Whether there is a remainder or not, the value that stored the original number is decremented by one. Then it goes back to the beginning of the loop, starting with the dividing by two.*

*$t2 holds all values when it goes to ADD.*

*The function is realized when the number goes down to 0. This is when $t0 is 1 and reduced by 1 or a zero is input.*