CS 232 – Computer Architecture I
Rose-Hulman Institute of Technology
Computer Science and Software Engineering Department

Lab 1 Questions

Answer the following questions as completely as possible and hand in before leaving the lab.

1. What is the address of `main` in `p1.asm`?

2. What are the values of \$2, \$3, and \$4 at main in `p1.asm`?

3. What are the values of \$2, \$3, and \$4 at the end of `p1.asm`? Hint: \$2 is not 43, why?

4. How do you tell `add` from `sub`? Be sure to explain fully.

5. How many many instructions are needed for `p4.asm`?

6. How many registers are needed for `p4.asm`?

7. What is the opcode for `lw`? How did you determine it?

8. At what address does the array `V` start in `main.asm`? How did you determine the address? How many bytes are occupied by each element of the array?

9. What is the purpose of the `sll $t0, $t0, 2` in `main.asm`? What happens when you comment it out? Be sure to explain why this happens?