Rose-Hulman Institute of Technology
Computer Science and Software Engineering
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Team _____1-1_____ Maximum Points : ____8__/ 10

Grading criteria for Pre-Milestone 1

1. Completeness of assembly language instructions (7 points)
    a. Instructions to access memory (1 point)
        - Effective address (register indirect/direct/base-displacement)

        L and S present.

    b. Instructions to do basic arithmetic (add, sub, logical) (1 point)
        - Number of operands
        - immediates
            - size of immediate field
        - memory operands (address calculation)

        3 registers, no immediate values.
        No memory operands, nor shifting.
        I suggest dropping multiply, it is difficult to implement.

    c. Instructions to conditionally branch (2 points)
        - MIPS-like "condition-code less"
        - Use of condition-codes
        - Effective address (register indirect/direct/base-displacement)
            - If register indirect/base-displacement, is there any way to load an entire address into the register
        - Size of address

        = provided. Register stored, with I for storing an address.

    d. Instructions to un-conditionally branch (1 point)
        - Effective address (register indirect/direct/base-displacement)
            - If register indirect/base-displacement, is there any way to load an entire address into the register
        - Size of address

        J provided. Jumps to an immediate, method unknown til milestone1

e. Instructions to handle procedures (1 point)
   - instruction to transfer control
   - instruction to return to calling procedure

   NO specific instructions for this. It will require a number of labels to accomplish this using only bequals and jump. Or the user must store the return address in some designated location. You may choose to run with this, I just suggest coming and talking to me before you do.
   -1

f. Other data movement instructions (1 point)
   - between registers
   - immediate value to register (size of immediate value)

   AND, OR, NOT, load upper, is less than are nice.

2. Program for Relatively prime value (3 points)
   a. Uses instructions from above-said list, not MIPS. (-3 if MIPS, don't continue.)
   b. Tests approximately ____50__ % of the above-listed instructions.
   c. Input values read from memory and output written to memory. (1 pt)

      Values assigned, not drawn from memory. -1

   d. Procedure used to determine the gcd using Euclid's algorithm as specified in the high-level language. (1 pt)

      A little confusing, it appears to be the algorithm, but ~c is used before being defined.

   e. Use of conditional instructions in main/procedure. (1 pt)

      Conditionals = and < are both in the program.

   f. Any conventions followed regarding parameter passing and returning values,
   g. Approximate number of registers the program uses.