

Team \_\_\_\_\_ 1-2 \_\_\_\_\_

Maximum Points : \_\_\_9\_\_\_ / 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)  
Loading possible, no storing. -1/2
  
  - b. Instructions to do basic arithmetic (add, sub, logical) (1 point)
    - Number of operands
    - immediates
      - size of immediate field
    - memory operands (address calculation)  
add, sub, no shift.
  
  - 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  
Beq available.
  
  - 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 is available.

- e. Instructions to handle procedures ( 1 point)
  - instruction to transfer control
  - instruction to return to calling procedurejal and jr available.
  
- f. Other data movement instructions (1 point)
  - between registers
  - immediate value to register (size of immediate value)li, lui, la, all available.

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 85 % of the above-listed instructions.
- c. Input values read from memory and output written to memory. (1 pt)

Read not outputted. -1/2

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

Looks like it.

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

Yep.

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