1) (2 pts) Trace the instruction ‘addi $s0, $s1, 0x23’ through the architecture.

2) (2 pts) Trace the instruction ‘add $s0, $s1, $s2’ through the architecture.
3) (2 pts) Trace the instruction ‘bgez $s0, Immed’ through the architecture.

4) (4 pts) What is the difference between a Trap and an Interrupt in terms of:
   a. Nature (what causes each?)
      A software call will generate a trap, while a hardware signal will generate an interrupt.
   
   b. Function (how is each used/what problem does each solve?)
      A trap is used by a program to request OS attention for exceptional situations or for access to restricted resources (divide by zero or putc)
      An interrupt is used by hardware to request servicing or alert readiness. (read buffer full or modem send buffer empty)