Hardware/Software Codesign Lab 3

Student Name:

Student ID:

1. Answer the following question:
2. Which register in the custom IP is used to control the leds? Can we use a different one? Show the modified code to use a different register to control the leds.  
   Register 0. Yes, we can use a different one. There are a total of 4 registers.

if (slv\_reg\_wren && (axi\_awaddr == 3'h1))

LED <= S\_AXI\_WDATA[LED\_WIDTH-1:0];

1. Can we move the instantiation of lab3\_user\_logic from led\_ip\_v1\_0\_S\_AXI.v to led\_ip\_v1\_0, why or why not?

Yes, we can as led\_ip\_v1\_0 is the top level wrapper for led IP.