Lab 2 Descriptions

1. This program displays four numbers onto the four hex displays SW[15:12] is the number on HEX3, SW[11:8] is HEX2, SW[7:4] is HEX1, and SW[3:0] is HEX0.
2. This program converts a four bit binary number into its respective decimal number, and displays it on the first two HEX displays.
3. This program implements a full adder with ripple carry using the code given in the lab manual.

LEDG4 is the final carry out of the ripple carry adder

LEDG[3:0] is the result of the adder

SW[8] is the carry in into the adder

SW[7:4] is the number to add to SW[3:0]

1. This program is an extension of Lab23. This program takes the two four bit numbers added together, as well as the carry out, and displays this 5 bit number in decimal onto the first two HEX displays. SW[3:0] is the first number, and SW[7:4] is the second to be added. SW[8] is the carry-in.
2. This program extends Lab24.v to add two 2 digit BCD numbers. It displays the 3 digit result onto HEX[2:0]. HEX[5:4] and HEX [7:6] are the two numbers that get added together.
3. This program uses verilog code to emulate a 2 digit BCD adder. It displays the 3 digit result onto HEX[2:0]. HEX[5:4] and HEX [7:6] are the two numbers that get added together
4. This program converts a six digit binary number denoted by SW[5:0] into a two digit decimal number, denoted by HEX[1:0].