

Problem 1) Using the 4-bit full adder that you developed in Part III of the Intel Lab, expand the full adder into an adder-subtractor. Use the switch  $SW_8$  as the sub/add control bit. Display the result in hex on the displays HEX6 and HEX5.

Problem 2) Implement the function  $Y = A + B - 20$  using 5-bit signed arithmetic where A and B are both unsigned binary numbers. Use switches  $SW[9:5]$  for A and  $SW[4:0]$  for B. Display the answer in hex on the displays HEX6 and HEX5.