Santa Clara University
Department of Electrical Engineering
ELEN 153 Digital Integrated Circuit Design

Pre-lab 5
Input Stimulus for 4-bit Adder

Name:_____

For the Lab Assignment 5, you will be entering the schematic of a 4-bit Adder. To test the correctness of the schematics entered, you need input stimulus. In the table below, work on 4-bit input vector pairs A and B to get the desired Carry and Sum outputs as described.

	A	**B**	**C_4, S**
Example	0000	1010	01010
1			10101
2			01010
3			10101
4			01010
5			10101
6			01010
7			10101
8			01010
9			10101
10			01010

Notes

1. Maximum value of a 4-bit vector is 1111. Do not exceed the maximum by using 5-bits.
2. Each unique combination of vector pairs A and B will be worth 10 points. Simply swapping A and B values will not count as two pairs. For example, the vector pair A=0000 B=1010, and A=1010 B=0000 are not unique, so is only worth 10 points.