Jacob Abel 6453
Student's Name and Last Four ID Digits

GTA Validation Instructions:
Program the FPGA on the DE1-SoC Nano board with the student's implementation of the FSM-Datapath. When the programming has successfully completed, perform the tests described below. Apply the values to the switches and/or press the key as indicated, reading from left to right. In general, the first value represents the opcode, the second value represents operand A, and the third value represents operand B. For each step, record the value of HEX[3:0] as the **Result**.

HEX[3:0] should not change its value while the switches are being changed. If they do change, make a note in the comments section. (HEX[3:0] should change while KEY1 or KEY0 is being pressed. That is acceptable and there is no need to make a note of it.)

SW[3:0]		SW[7:4]	SW[3:0]		SW[7:4]	SW[3:0]		Result
							KEY0	____ ____ ____ ____
0000	KEY1	0000	0000	KEY1	0000	0000	KEY1	____ ____ ____ ____

Compare the last result to the last four digits of the student's ID number. If the digits do not match, STOP THE VALIDATION. DO NOT CONTINUE.

SW[3:0]		SW[7:4]	SW[3:0]		SW[7:4]	SW[3:0]		Result
0001		1100	0001					
0010	KEY1	0011	1001	KEY1	0101	0011	KEY1	____ ____ ____ ____
0011	KEY1	0110	1010	KEY1	0011	0100	KEY1	____ ____ ____ ____
0100	KEY1	0011	0101	KEY1				____ ____ ____ ____
0101	KEY1	0111	1010	KEY1	1101	0110	KEY1	____ ____ ____ ____
0110	KEY1	0100	0011	KEY1	0110	1101	KEY1	____ ____ ____ ____
1000	KEY1	0110	0011	KEY1	0000	0111	KEY1	____ ____ ____ ____
1001	KEY1	1110	1110	KEY1	0000	0011	KEY1	____ ____ ____ ____
1010	KEY1	0011	1010	KEY1	0000	0101	KEY1	
1011	KEY1	0011	1010	KEY1	0000	0101	KEY1	

The validation continues on the next page.

SW[3:0]
1100
1101

KEY1

SW[7:4]	SW[3:0]
0011	1100
0111	1101

KEY1

SW[7:4]	SW[3:0]
0110	0111

	Result
KEY1	____ ____ ____ ____
KEY1	____ ____ ____ ____
KEY1	____ ____ ____ ____
KEY1	____ ____ ____ ____
KEY1	____ ____ ____ ____
KEY1	____ ____ ____ ____
KEY1	____ ____ ____ ____
KEY1	____ ____ ____ ____
KEY1	____ ____ ____ ____

Comments (only required if something is unusual or wrong):

GTA Printed Name

GTA Signature

Date and Time of Validation