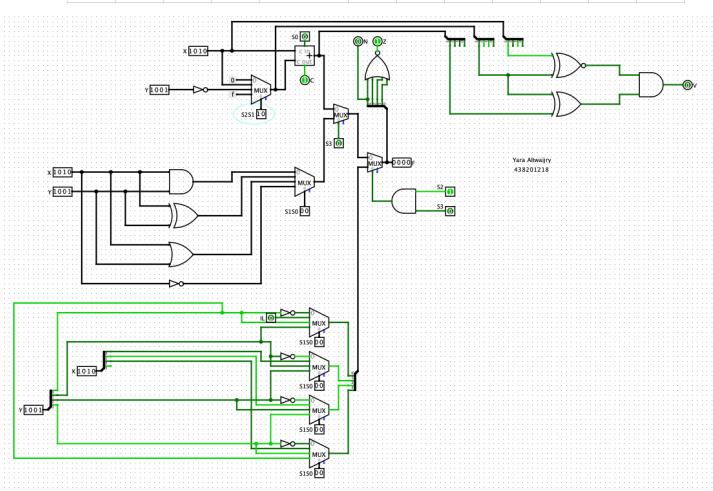College of Computer and Information Sciences
Computer Science Department
Computer Organization (CSC 220)

Project 220

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S3	S2	S1	S0	OPERATION	X	Y	G	C	V	N	Z
0	1	0	0	$G=X+Y'$	1010	1001	0000	1	0	0	1

S3	S2	S1	S0	OPERATION	X	Y	G	C	V	N	Z
	INPUT					INPUT			RESULT		
S3	S2	S1	S0	OPERATION	X	Y	G	C	V	N	Z
0	0	0	0	G=X	1010	1001	1010	0	0	1	0
0	0	0	0	G=X	0001	0010	0001	0	0	0	0
0	0	0	1	G=X+1	1010	1001	1011	0	0	1	0
0	0	0	1	G=X+1	0001	0010	0010	0	0	0	0
0	0	1	0	G=2*X	1010	1001	0100	1	1	0	0
0	0	1	0	G=2*X	0001	0010	0010	0	0	0	0
0	0	1	1	G=2*X+1	1010	1001	0101	1	1	0	0
0	0	1	1	G=2*X+1	0001	0010	0011	0	0	0	0
0	1	0	0	G=X+Y'	1010	1001	0000	1	0	0	1
0	1	0	0	G=X+Y'	0001	0010	1110	0	0	1	0
0	1	0	1	G=X+Y'+1	1010	1001	0001	1	0	0	0
0	1	0	1	G=X+Y'+1	0001	0010	1111	0	0	1	0
0	1	1	0	G=X-1	1010	1001	1001	1	0	1	0
0	1	1	0	G=X-1	0001	0010	0000	1	0	0	1
0	1	1	1	G=X	1010	1001	1010	1	0	1	0
0	1	1	1	G=X-1	0001	0010	0001	1	0	0	0
1	0	0	0	G=X AND Y	1010	1001	1000	X	X	1	0
1	0	0	0	G=X AND Y	0001	0010	0000	X	X	0	1
1	0	0	1	G=X XOR Y	1010	1001	0011	X	X	0	0
1	0	0	1	G=X XOR Y	0001	0010	0011	X	X	0	0
1	0	1	0	G=X OR Y	1010	1001	1011	X	X	1	0
1	0	1	0	G=X OR Y	0001	0010	0011	X	X	0	0
1	0	1	1	G=X'	1010	1001	0101	X	X	0	0
1	0	1	1	G=X'	0001	0010	1110	X	X	1	0
1	1	0	0	G=Y'	1010	1001	0110	X	X	0	0
1	1	0	0	G=Y'	0001	0010	1101	X	X	1	0
1	1	0	1	G= Logical Shift left X	1010	1001	0100	X	X	0	0

S3	S2	S1	S0	OPERATION	X	Y	G	C	V	N	Z
1	1	0	1	G= Logical Shift left X	0001	0010	0010	X	X	0	0
1	1	1	0	G=Y	1010	1001	1001	X	X	1	0
1	1	1	0	G=Y	0001	0010	0010	X	X	0	0
1	1	1	1	G=Rotate Shift Right Y	1010	1001	1100	X	X	1	0
1	1	1	1	G=Rotate Shift Right Y	0001	0010	0001	X	X	0	0