Assignment 3

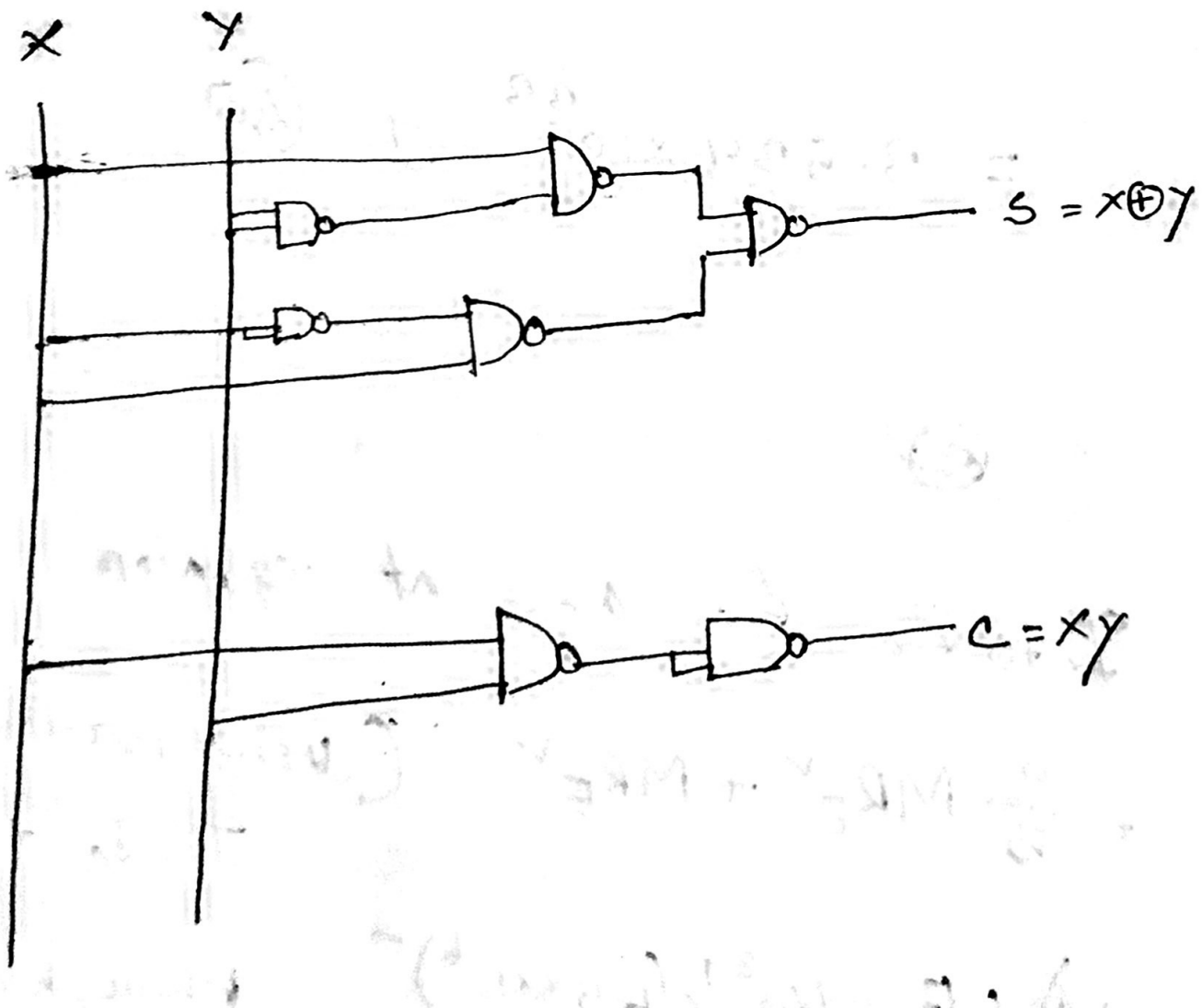
Sikder Sahriar
ID: 20101402, Section: 11

Answer to the Q 1

Half Adder Using NAND Gates-

Equation: sum = $XY' + X'Y = X \oplus Y$

Carry = XY



Answer to the question no 2

here,

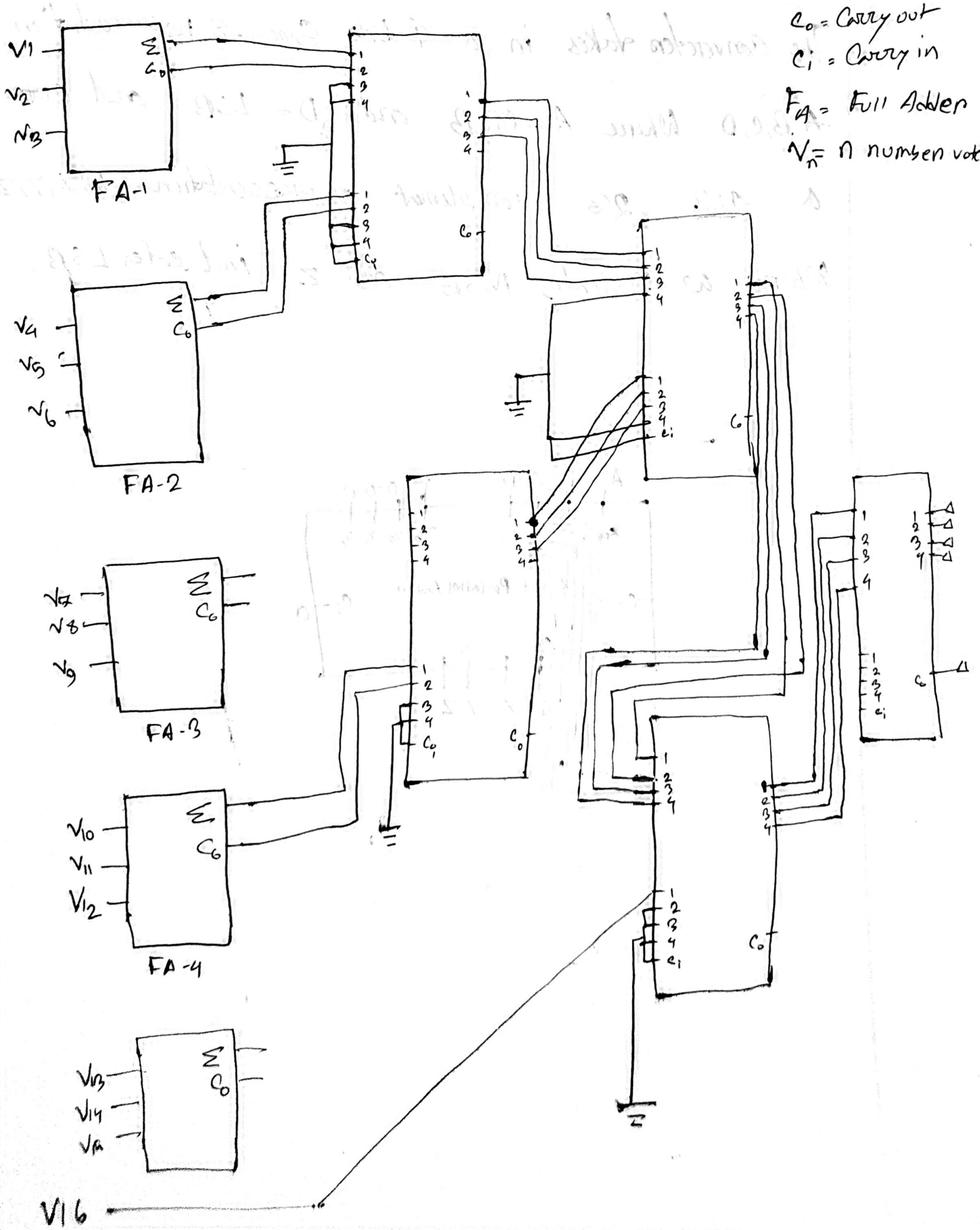
Σ = sum

C_o = Carry out

C_i = Carry in

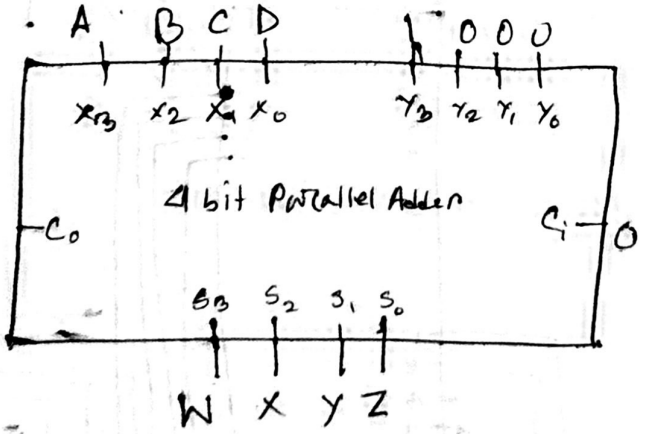
FA = Full Adder

V_n = n number volt



Answer to the question no 3

The converter takes in a 4 bit Excess-8 representation A, B, C, D Where A = MSB and D = LSB and outputs a 4bit 2's complement representation W, X, Y, Z Where W indicates MSB and Z indicates LSB.



Answer to the question no 4