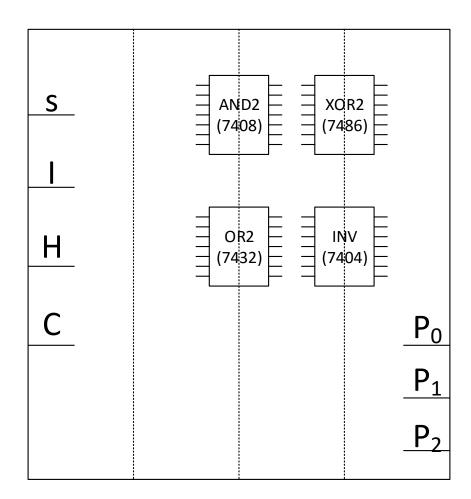
Demo of Profit Calculator

step1: place all required chips on your bread board

step2: connect VCC & GND for all chips

step3: Define your input pins S/I/H/C using DIP switch or direct jumper wires



step4: implement output P0, and display through LED, $P_0 = I + H + CS$

and debug it based on truth table (test at least test five cases)

•	S	エ	H	C	P2	Pi	Po	
NONE	0	0	0	0	0	0	D	0
H	0	0	(0	0		1	3
C	0	0	0	1	1	0	0	4
S	1	0	0	0	0	1	D	2
I	0	1	0	0	0	0	1	1
. HC	0	0			1	1	1	7
HS		0		O	1	0	1	5
HI	0	1	1	0	0	1	1	3
CS		0	0	1	1	1	1	7
CI	0		0	1	0	1	1	3
SI			0	0	0	1	1	3

step5: implement output P1, and display through LED, debug it based on truth table (test at least test five cases)

$$P_1 = H \oplus S + CI$$

step6: implement output P2, and display through LED, debug it based on truth table (test at least test five cases)

$$P_2 = \bar{I}C + HS$$

step7: use truth table to make sure your logic is completely right

step8: connect output P2/P1/P0 to 7-segment display chip step9: verify your binary results of LEDs are consistent with 7-segment display.