① CHAVE = C

$\begin{cases} C = 0 \Rightarrow A \\ C = 1 \Rightarrow B \end{cases}$

C	A	B	S
0	0	0	0
0	0	1	0
0	1	0	1
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	1

	$\bar{A}$		A	
$\bar{C}$	0	0	1	1
C	0	1	1	0
	$\bar{B}$	B	B	$\bar{B}$

$S = \bar{C}A + CB$
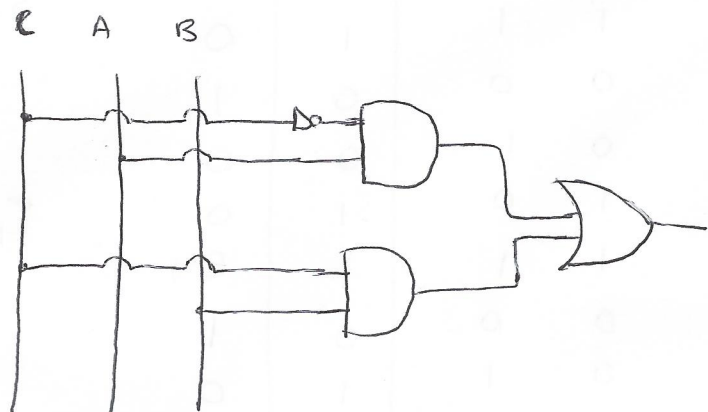
② SENSOR = S

$\begin{cases} \text{COM ÁGUA} = 1 \\ \text{SEM ÁGUA} = 0 \end{cases}$

BOTÃO = B

$\begin{cases} \text{ATIVADO} = 1 \\ \text{DESATIVADO} = 0 \end{cases}$

ELETROVÁLVULAS

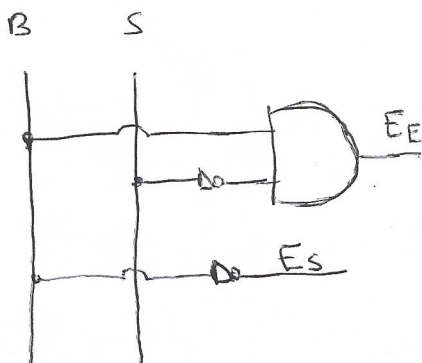$\begin{cases} \text{LIGADA} = 1 \\ \text{DESLIGADA} = 0 \end{cases}$

B	S	E_E	E_S
0	0	0	1
0	1	0	1
1	0	1	0
1	1	0	0

$E_E = B\bar{S}$

$E_S = \bar{B}\bar{S} + \bar{B}S$

	$\bar{S}$	S
$\bar{B}$	1	1
B	0	0

$E_S = \bar{B}$

③

SENSOR 1 = S1
SENSOR 2 = S2
BOTÃO 1 = B1
BOTÃO 2 = B2

S1	S2	B1	B2	E_E	E_S
0	0	0	0	0	1
0	0	0	1	1	0
0	0	1	0	1	0
0	0	1	1	1	0
0	1	0	0	0	1
0	1	0	1	0	0
0	1	1	0	1	0
0	1	1	1	1	0
1	0	0	0	0	1
1	0	0	1	1	0
1	0	1	0	1	0
1	0	1	1	1	0
1	1	0	0	0	1
1	1	0	1	0	0
1	1	1	0	0	0
1	1	1	1	0	0

MAPA VK PARA E_E

$$E_E = \overline{S1}B1 + \overline{S2}B2$$

$$E_S = \overline{B1}.\overline{B2}$$

S1 S2 B1 B2