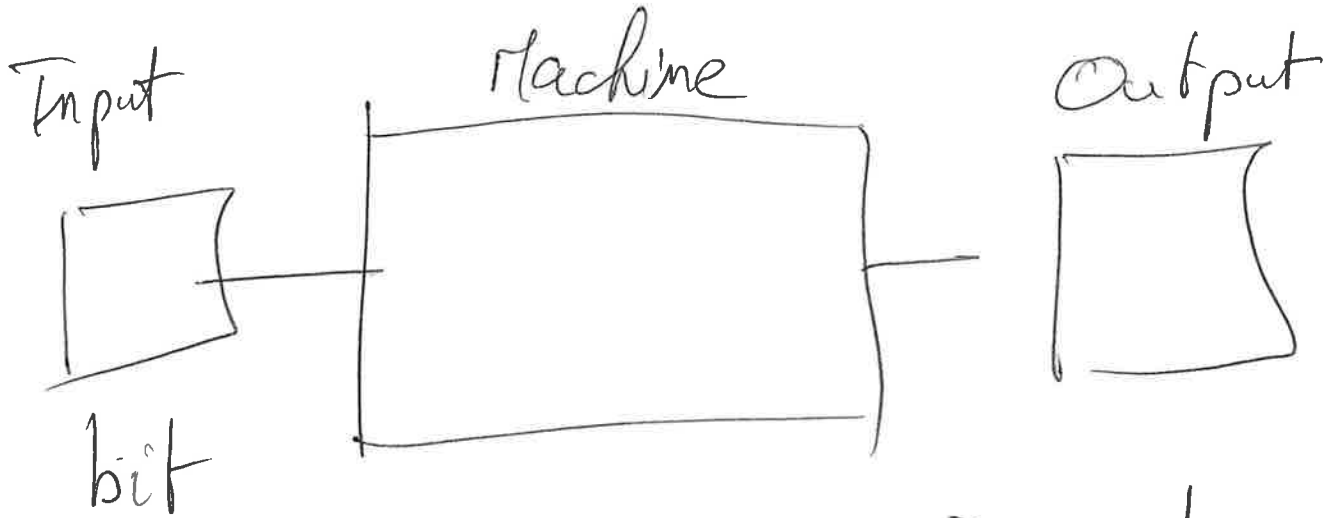


Logic gates

1/23/26

①

I) Inverter



0



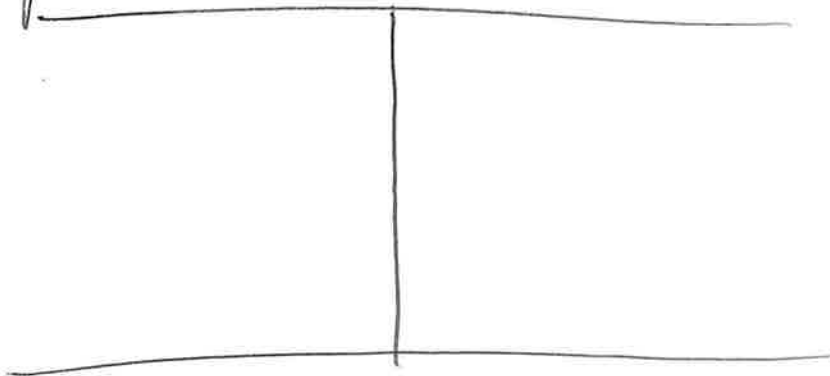
1

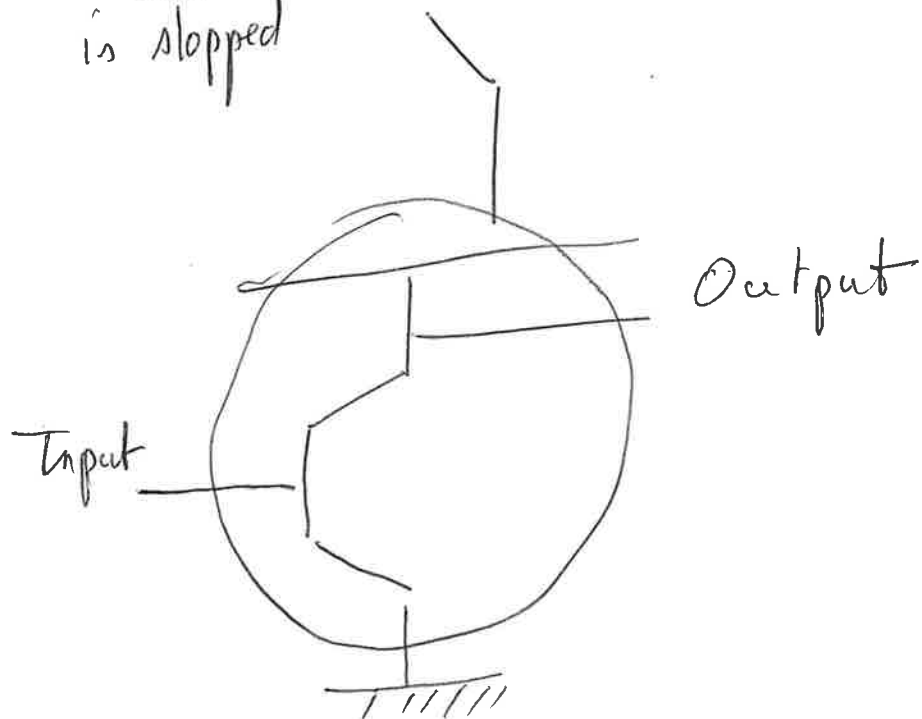
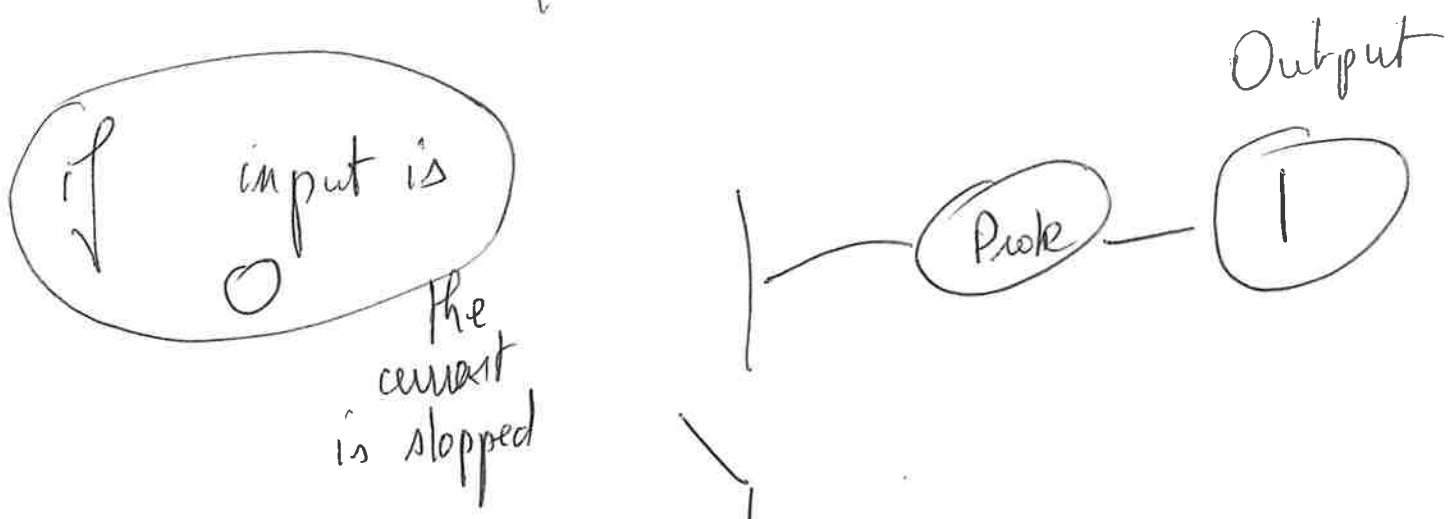
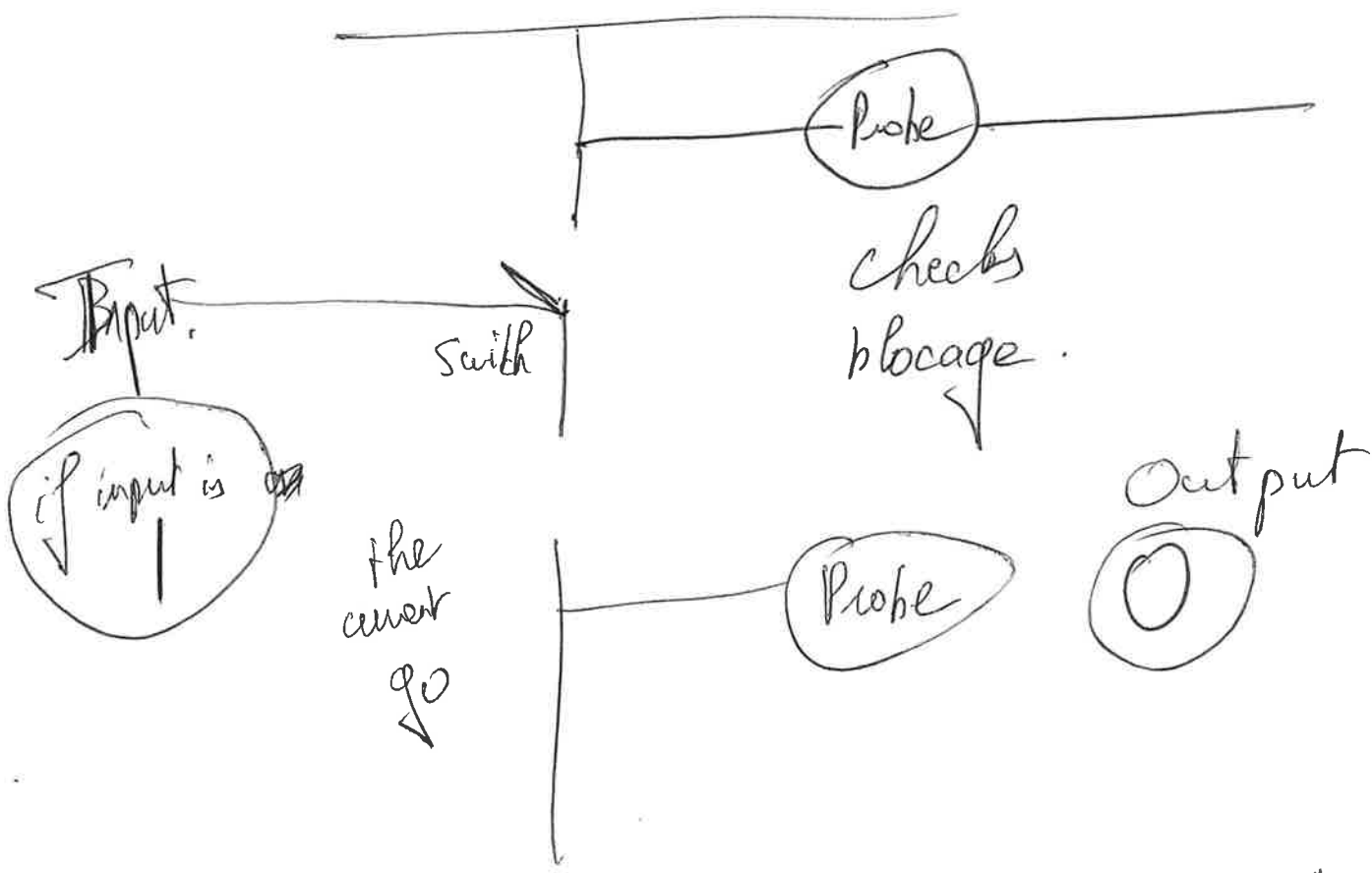
1



0

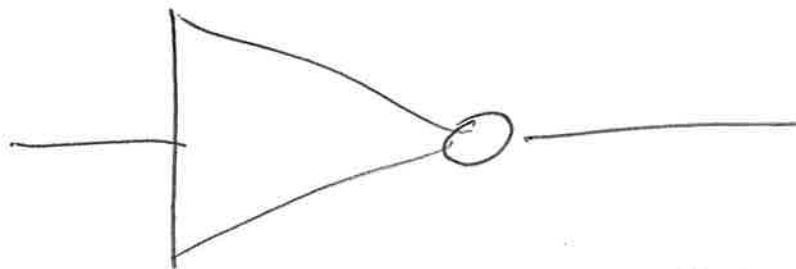
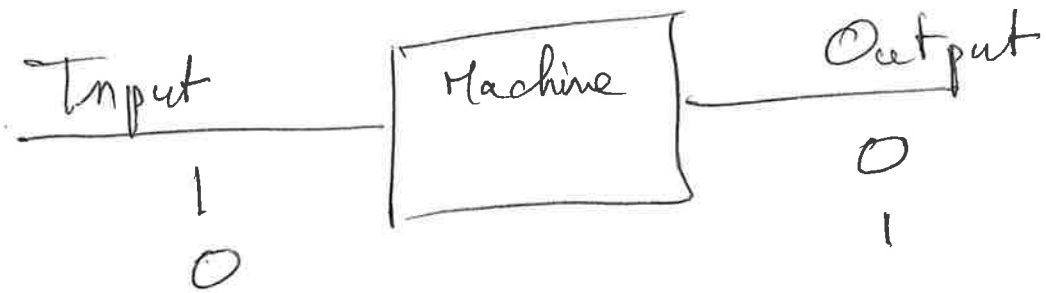
Diagram





3

Understand the inverter:



A

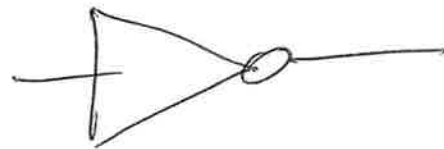


$$f(A) = \overline{A}$$

$\overline{A}$

is

drawing



Logic table

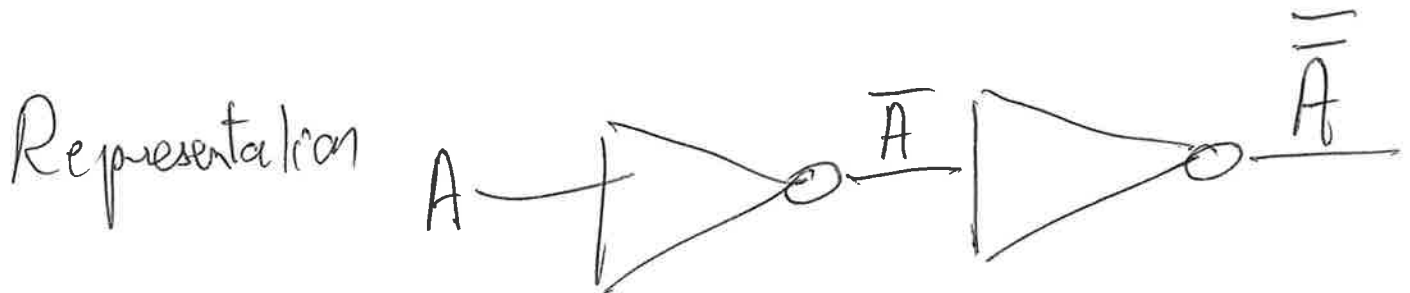
A	$\overline{A}$
1	0
0	1

(4)

New function:

Input $A \rightarrow \overline{\overline{A}}$

$$\overline{\overline{A}} = \overline{(\overline{A})}$$



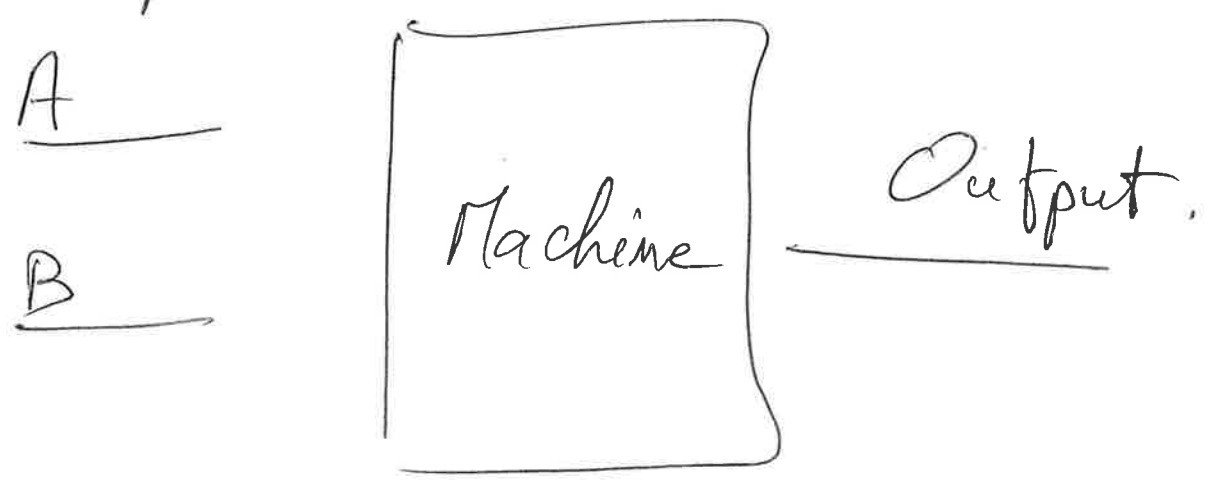
logic table:

A	$\overline{A}$	$\overline{\overline{A}}$
1	0	1
0	1	0

Result :

$$\overline{\overline{A}} = A$$

II) An operator that works on 2 inputs



What about a machine that performs AND:

logically:

A	B	AND
1	1	1
1	0	0
0	1	0
0	0	0

Representation

