Information & Communication Technology

Logic Gates

Grade 8

P.G.Y.P.Rathnasiri
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RNCOE

LIVEWORKSHEETS

Logic Gates

Circuits which enable building of certain logical conditions using binary values and which enable making certain decisions, are called Logic Circuits. The Computer is made of a large number of complex digital circuits. These electronic circuits are designed as required connecting a large number of basic logical circuits called logic gates.

LIVEWORKSHEETS

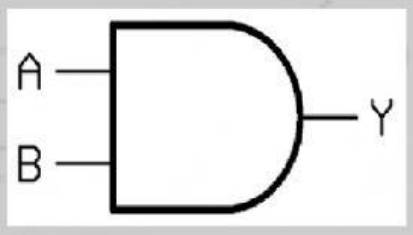
Basic Logic Gates

1. AND gate

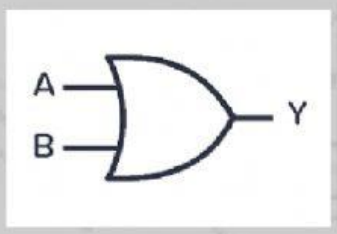
2. OR gate

3. NOT gate

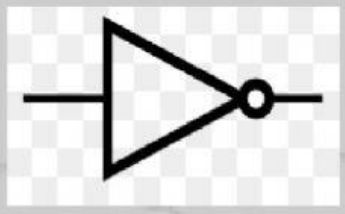
LIVEWORKSHEETS



1. AND gate



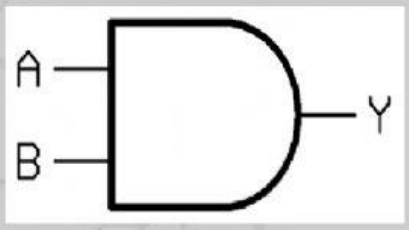
2. OR gate



3. NOT gate

LIVEWORKSHEETS

1. AND gate

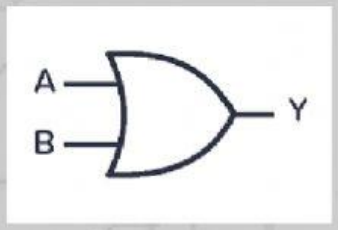


A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

❖ **When at lest one of the inputs is “0”, The output is “0”**

LIVEWORKSHEETS

2. OR gate

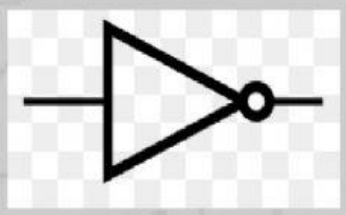


A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

❖ When at lest one of the inputs is “1”, The output is “1”

LIVEWORKSHEETS

3. NOT gate



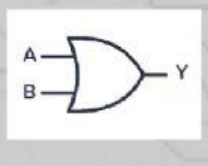
Input	Output
1	0
0	1

- When the inputs is “1”, The output is “0”
- When the inputs is “0”, The output is “1”

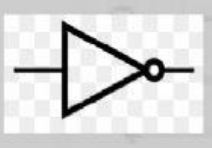
LIVEWORKSHEETS

- **Match the Logic Gates**

1.NOT gate



2.AND gate



3.OR gate



LIVEWORKSHEETS

- **Fill in the Blanks**

1. AND gate

A	B	Y
0	0	
0	1	
1	0	
1	1	1

2. OR gate

A	B	Y
0	0	0
0	1	
1	0	
1	1	

3. NOT gate

Input	Output
1	
0	

LIVEWORKSHEETS