



GOVERNMENT POLYTECHNIC, NANDED

MICRO PROJECT

Academic year: 2019-20

TITLE OF THE PROJECT

Output of AND Logic Gates

Program: Information Tech. Program code: IF3I

Course: DTM Course code: 22323

Name of Guide:- S.R. SHAMRAJ



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Certificate

This is certifying that Roll No. **945,948,949** of **3rd** Semester of Diploma in **Information Technology** of Institute, GOVERNMENT POLYTECHNIC has completed the Micro Project satisfactorily in Subject -**DTM (22323)** for the academic year **2019- 2020** as prescribed in the curriculum.

Place: **Nanded**

Date:

Subject Teacher

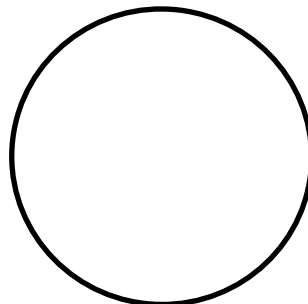
S.R. SHAMRAJ

Head of the Department

S.N.DHOLE

Principal

DR.G.V.GARJE



WEEKLY PROGRESS REPORT

TITLE OF THE MICRO PROJECT:- Output of AND Logic Gates

W E E K	A C T I V I T Y P E R F O R M E D	S I G N O F G U I D E	D A T E
1 ST	Discussion and finalization of Topic		
2 ND	Discussion and finalization of Topic		
3 RD	Preparation and submission of Abstract		
4 TH	Literature Review		
5 TH	Collection of Data		
6 TH	Collection of Data		
7 TH	Collection of Data		
8 TH	Collection of Data		
9 TH	Discussion and Outline of Content		
10 TH	Formulation of Content		
11 TH	Editing and 1 st Proof Reading of Content		
12 TH	Editing and 2 nd Proof Reading of Content		
13 TH	Compilation of Report and Presentation		
14 TH	Seminar		
15 TH	Viva-voce		
16 TH	Final submission of Micro project		

Sign of the student

Sign of the faculty

S.R. SHAMRAJ

ANEEXURE II

Evaluation Sheet for the Micro Project

Academic Year: 2019-20

Name of the Faculty: S.R. SHAMRAJ

Course: DTM

Course code: 22323

Semester: III

Title of the project: **Output of AND Logic Gates**

Cos addressed by Micro Project:

A: Formulate grammatically correct sentences.

B: Give presentation by using audio visual aids.

C: Communicate Skillfully.

D: Write reports using correct guidelines.

Major learning outcomes achieved by students by doing the project

(a) Practical outcome:

- 1) Deliver presentation (seminar) effectively.

(b) Unit outcomes in Cognitive domain:

- 1) Prepare the points for computer presentation.
- 2) Make seminar presentation.

(c) Outcomes in Affective domain:

- 1) Function as team member.
- 2) Follow Ethics.
- 3) Make proper use of computer and Internet

Comments/suggestions about team work /leadership/inter-personal communication (if any)

Roll No	S t u d e n t N a m e	Marks out of 4 for performance in group activity (D 5 C o l . 8)	Marks out of 2for performance in oral/ presentation (D 5 C o l . 9)	Total out of 06
9 4 5	Harsh santosh zanwar			
9 4 8	Amaan Khan Pathan			
9 4 9	MD .Hifaz Ali Khan			

(Signature of Faculty)

S.R. SHAMRAJ

GROUP DETAILS

Roll No.	Name	Enrollment No.
945	Harsh Santosh Zanwar	1800200119
948	Amaan khan Pathan	1815660
949	MD.Hifaz khan	1815660141

Course : Digital technique and
Microprocessor

Name of Guide: S.R. SHAMRAJ

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INTRODUCTION

In electronics, Logic gates are the building blocks of every electronic circuit. Logic gates defined as the simple electronic circuits having one or more input and a single output. Their operation varies from one type of logic gate to another. The relationship between input and output follow a certain logical equation.

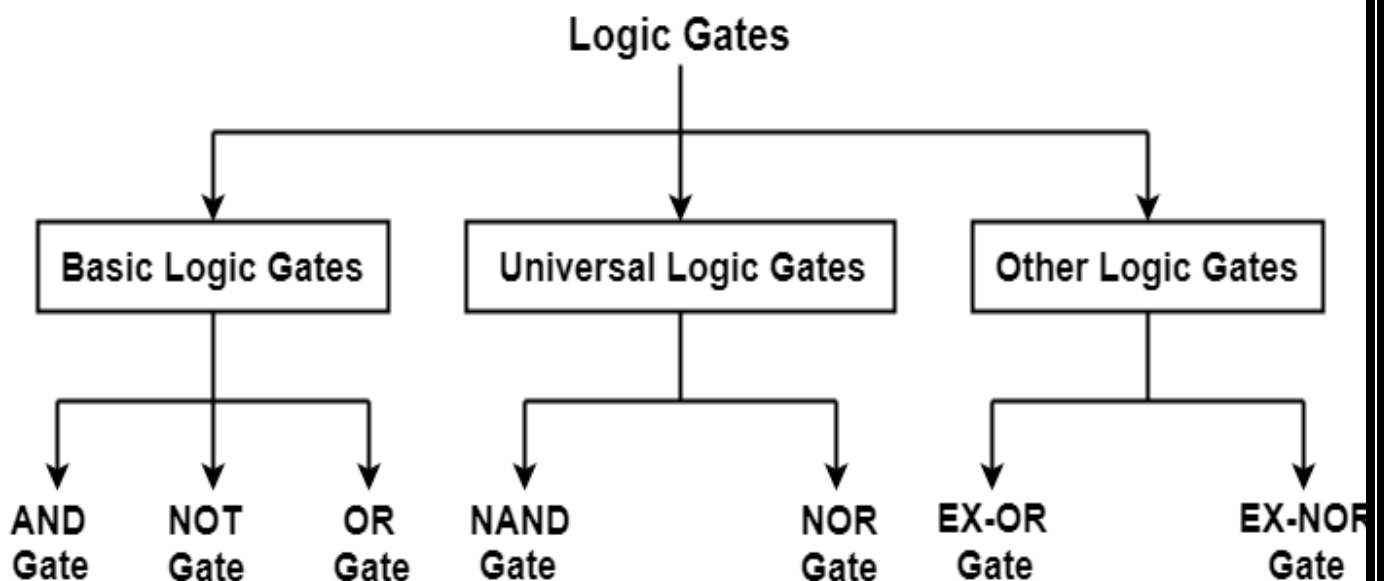
Basically, all logic gates have one output and two inputs. Some logic gates like NOT gate or Inverter has only one input and one output. The inputs of the logic gates are designed to receive only binary data (only low 0 or high 1) by receiving the voltage input. The low logic level represents Zero volts and high logic level represents 3- or 5-volts positive supply voltage. We can connect any number of logic gates to design a required digital circuit. Practically, we implement the large number of logic gates in ICs, by which we can save the physical space occupied by the large number of logic gates. We can also perform complicated operations at high speeds by using integrated circuits (IC). By combining logic gates, we can design many specific circuits like flip flops, latches, multiplexers, shift registers etc.

Logic Gates

In electronics, Logic gates are the building blocks of every electronic circuit. Logic gates defined as the simple electronic circuits having one or more input and a single output. Their operation varies from one type of logic gate to another. The relationship between input and output follow a certain logical equation

TYPES OF LOGIC GATES-

Logic gates can be broadly classified as-



Classification of Logic Gates

➤ BASIC LOGIC GATES-

Basic Logic Gates are the fundamental logic gates using which universal logic gates and other logic gates are constructed.

- **Properties of Basic Logic Gates-**

- Basic logic gates are associative in nature.
- Basic logic gates are commutative in nature.

- **Types of Basic Logic Gates-**

In digital electronics, there are mainly three basic logic gates which are-

1. AND Gate
2. OR Gate
3. NOT Gate

1. AND Gate-

- The output of AND gate is high ('1') if all its inputs are high ('1').
- The output of AND gate is low ('0') if any one of its inputs is low ('0')

2. OR Gate-

- The output of OR gate is high ('1') if any one of its inputs is high ('1').
- The output of OR gate is low ('0') if all its inputs are low ('0').

3. NOT Gate-

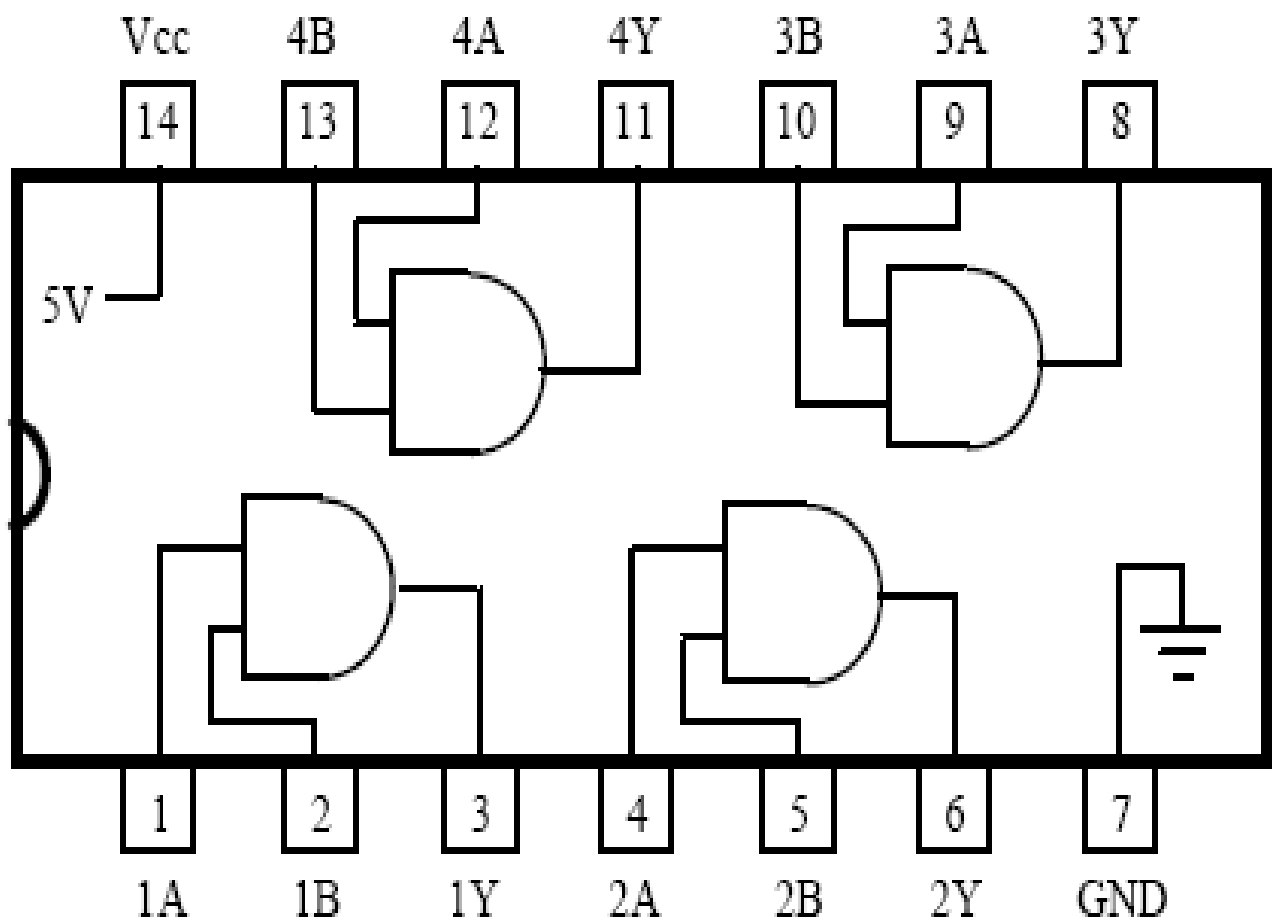
- The output of NOT gate is high ('1') if its input is low ('0').
- The output of NOT gate is low ('0') if its input is high ('1').

➤ AND LOGIC GATES



AND GATE IC 7408

INPUT		OUTPUT
A	B	A AND B
0	0	0
0	1	0
1	0	0
1	1	1



Reference

1) [AND gate - Wikipedia](https://en.wikipedia.org/wiki/AND_gate) https://en.wikipedia.org/wiki/AND_gate

2) [Logical AND Gate | Electrical4U](https://www.electrical4u.com/logical-and-gate/)

<https://www.electrical4u.com/logical-and-gate/>

3) Manual

4) Tech-Max Book



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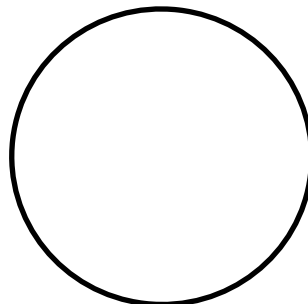
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This is certify that Mr./Ms. **Amaan khan Pathan** of **3rd** Semester of Diploma in **Information Technology** of Institute, GOVERNMENT POLYTECHNIC has completed the Micro Project satisfactorily in Subject -**DTM (22323)** for the academic year **2019- 2020** as prescribed in the curriculum.

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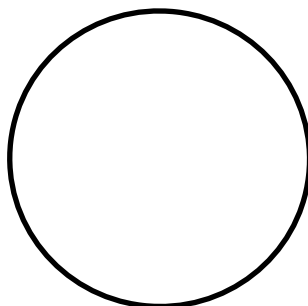
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This is certify that Mr./Ms. HARSH SANTOSH ZANWAR of 3rd Semester of Diploma in **Information Technology** of Institute, GOVERNMENT POLYTECHNIC has completed the Micro Project satisfactorily in Subject -**DTM (22323)** for the academic year **2019-2020** as prescribed in the curriculum.

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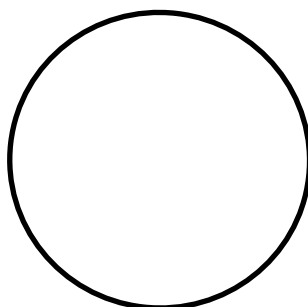
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CONCLUSION

REFERENCE:

SOURCES USED

