Dept. of Computer Science &Engineering

Course Code: CSE-2324

Course Title : Digital Logic Design Lab

Submitted by:

Name: *Farida Nusrat*

ID: *C201242*

Semester: *3rd*

Section: *3AF*

Contact: *01303994149*

Email:c201242@ugrad.iiuc.ac.bd

Department of CSE, IIUC

Submitted to:

Mrs. Subrina Akter, Assistant Professor, Dept. of CSE,IIUC

SIGN: Farida Nusrat

SUBMISSION: *24-10-21*

Experiment No: 08

Experiment Name: Implement 3 bit binary to octal decoder

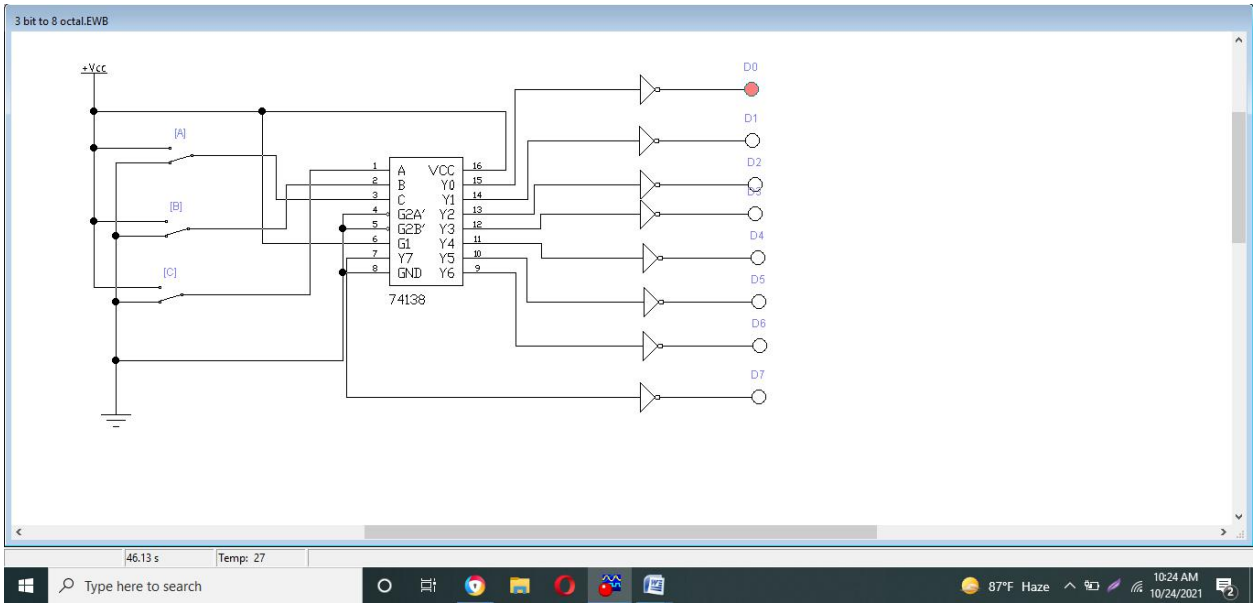
Required tools:

- ➢ IC 74138
- ➢ Wires
- ➢ LED
- ➢ Electronic Workbench Software

Turth Table:

A	B	C	D_0	D_1	D_2	D_3	D_4	D_5	D_6	D_7
0	0	0	1	0	0	0	0	0	0	0
0	0	1	0	1	0	0	0	0	0	0
0	1	0	0	0	1	0	0	0	0	0
0	1	1	0	0	0	1	0	0	0	0
1	0	0	0	0	0	0	1	0	0	0
1	0	1	0	0	0	0	0	1	0	0
1	1	0	0	0	0	0	0	0	1	0
1	1	1	0	0	0	0	0	0	0	1

IC level diagram:



Result Discussion:

3-bit binary numbers at the input is converted to eight digits at the output (which is equivalent to octal number system). At a given time only one output is low and all other outputs will be high.

Any problem arises:

No.

What Have I learnt :

I have learn some how simple inputs of ones and zeros can be used to store information for output.