



## ***Dept. of Computer Science & Engineering***

**Course Code:** CSE-2324

**Course Title** : Digital Logic Design Lab

### **Submitted by:**

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***Semester:*** 3<sup>rd</sup>

***Section:*** 3AF

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### **Submitted to:**

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Assistant Professor

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**SIGN:**

Farida Nusrat

**SUBMISSION:** 10-10-21

## **Experiment No: 06**

**Experiment Name:** Design a BCD to 7 segment decoder

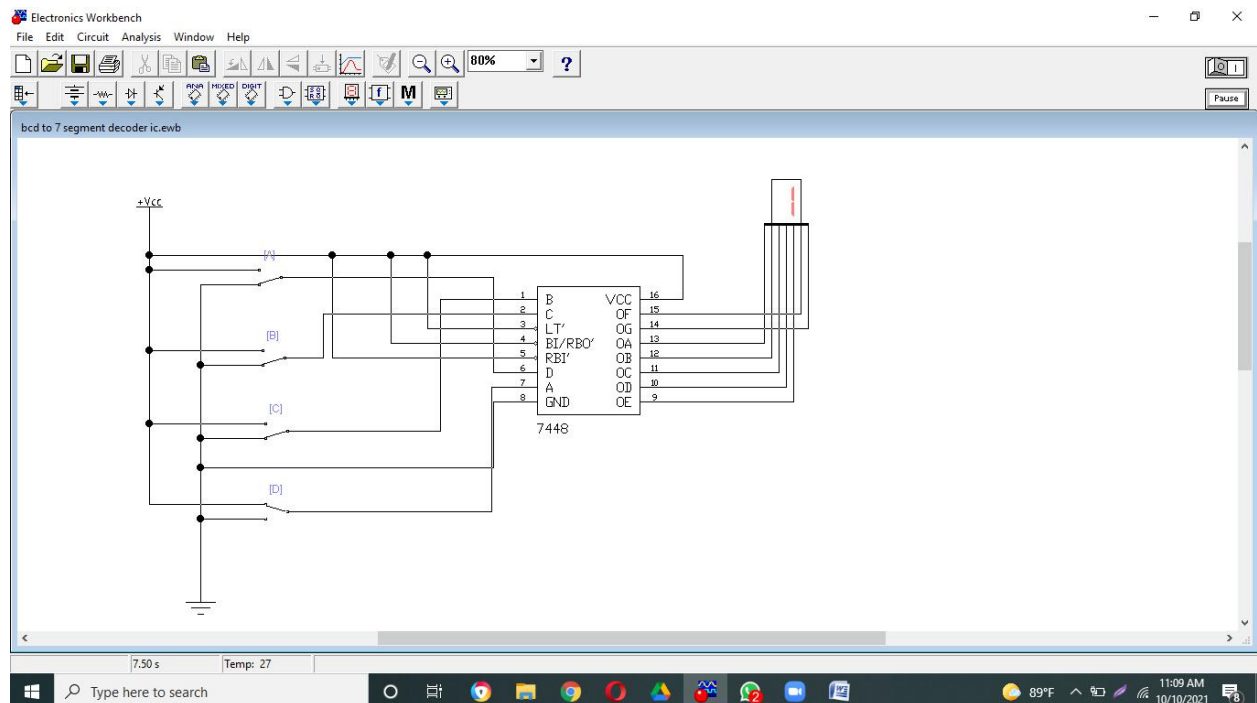
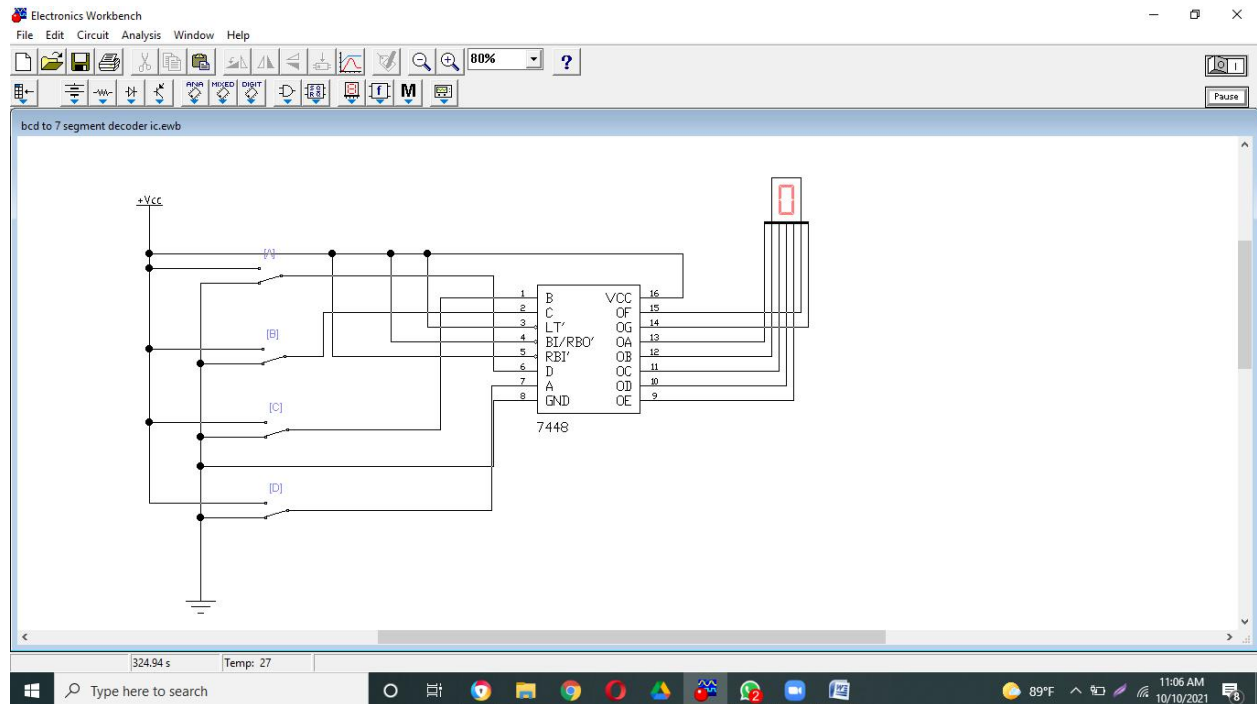
### **Required tools:**

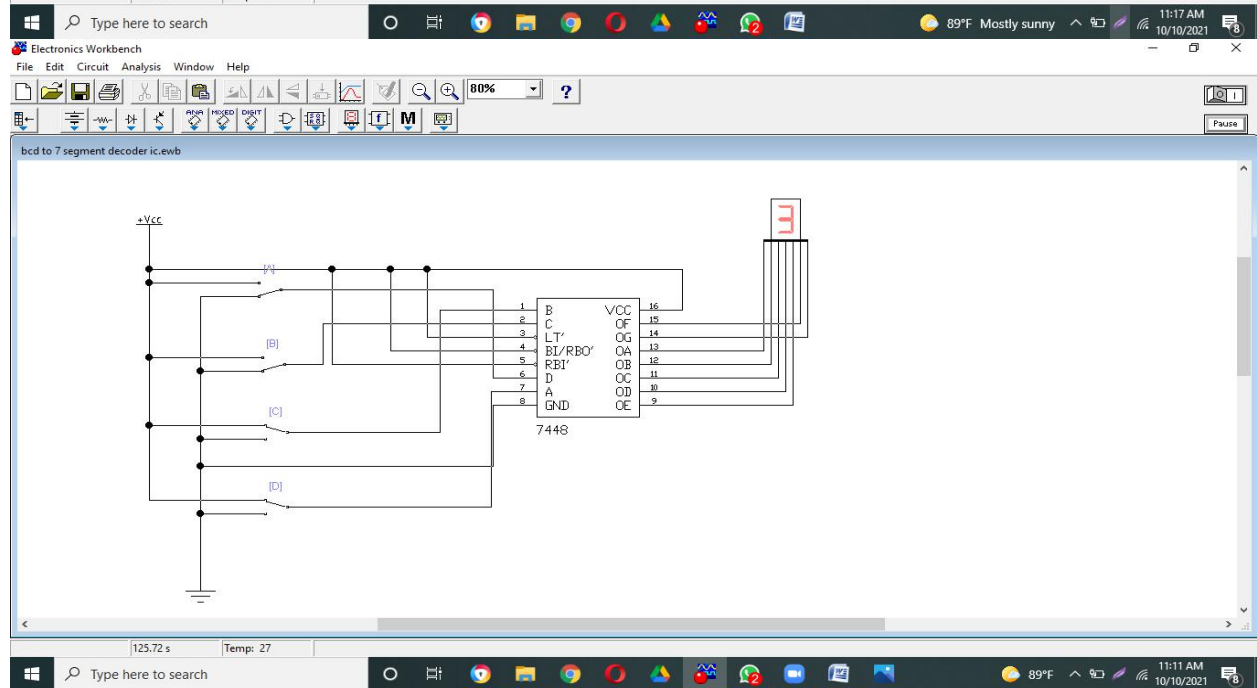
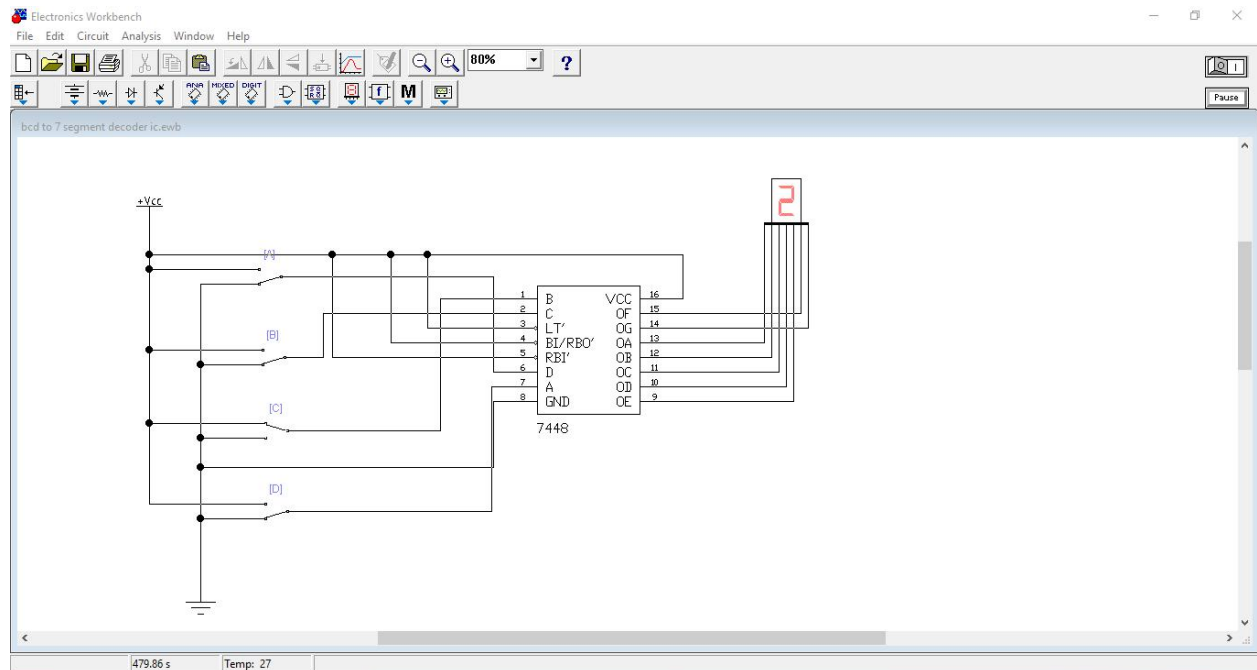
- IC 7448
- Wires
- LED
- Electronic Workbench Software

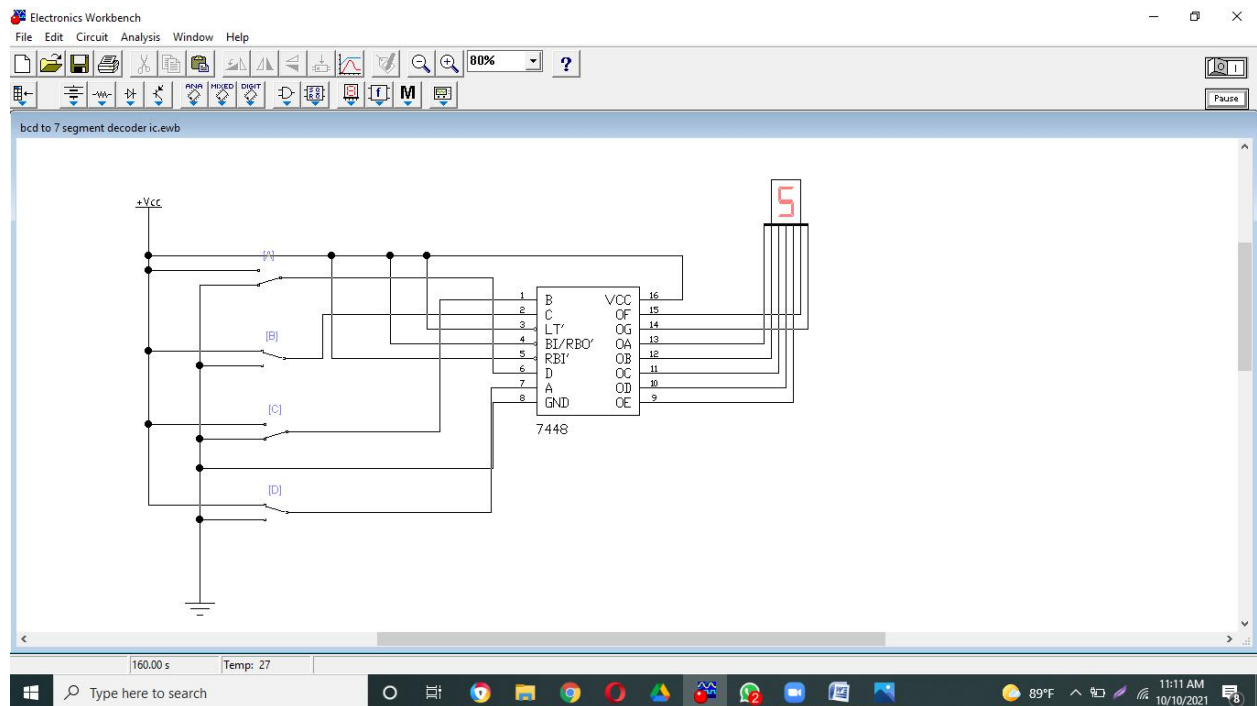
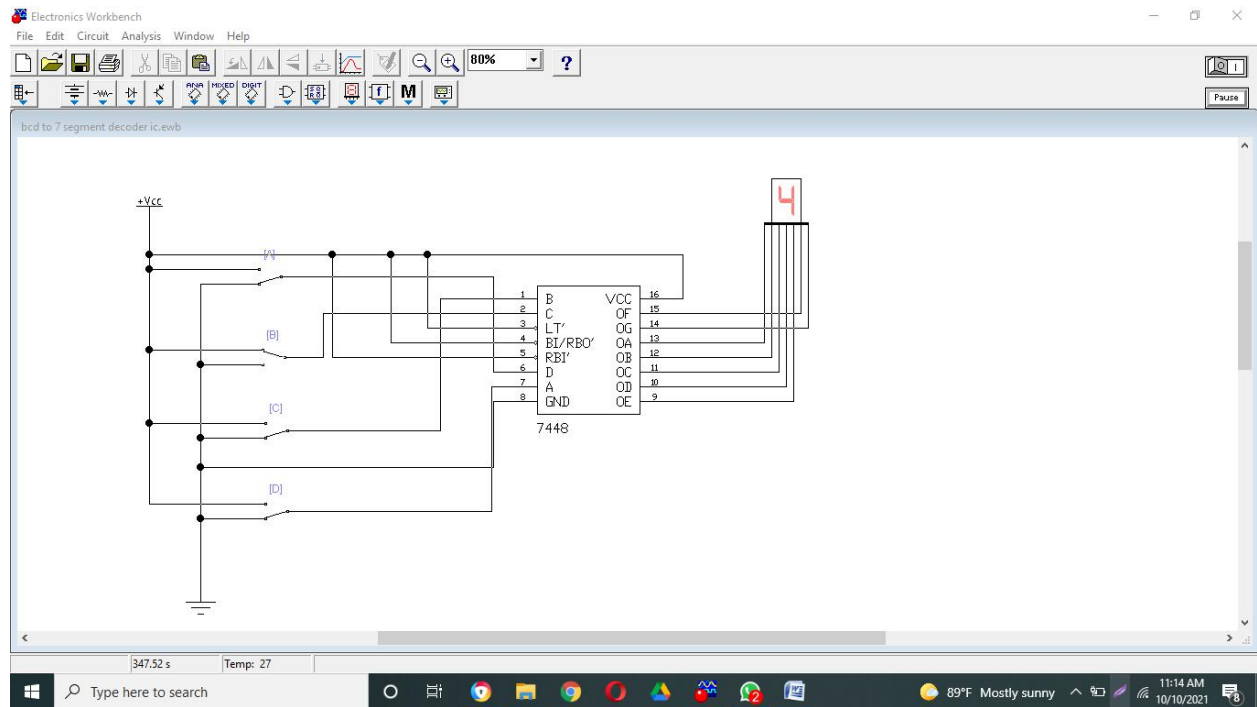
### **Turth Table:**

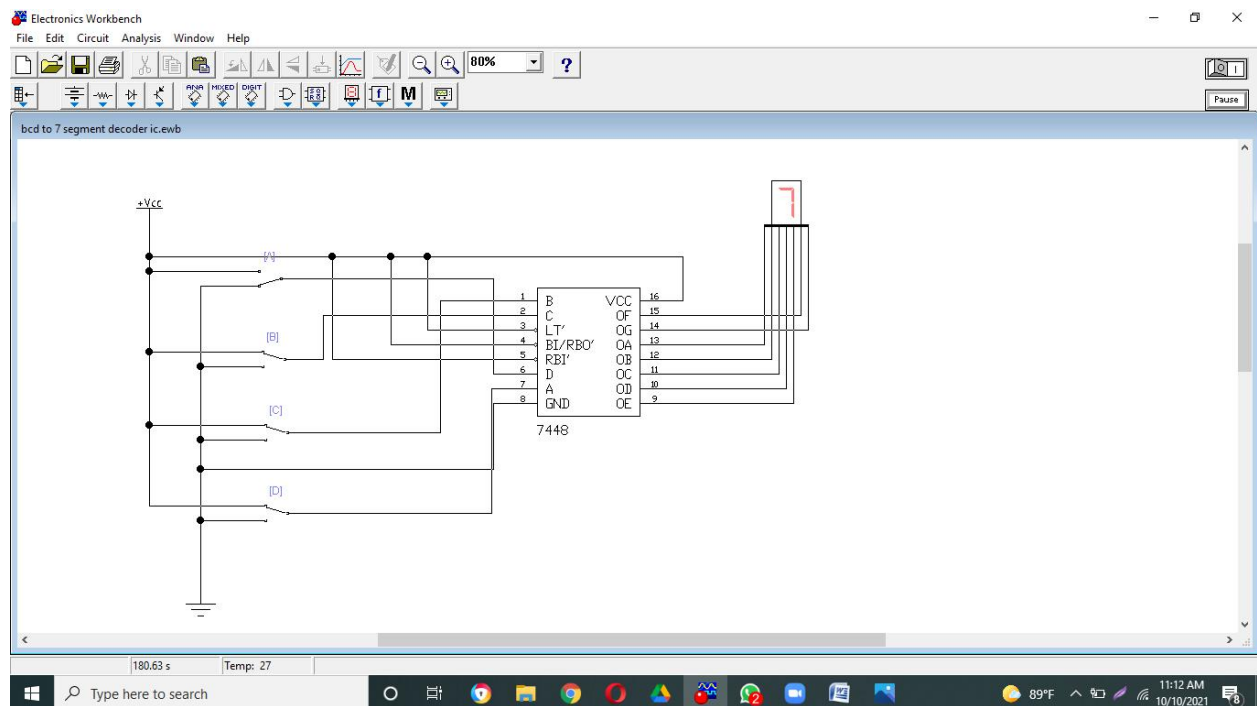
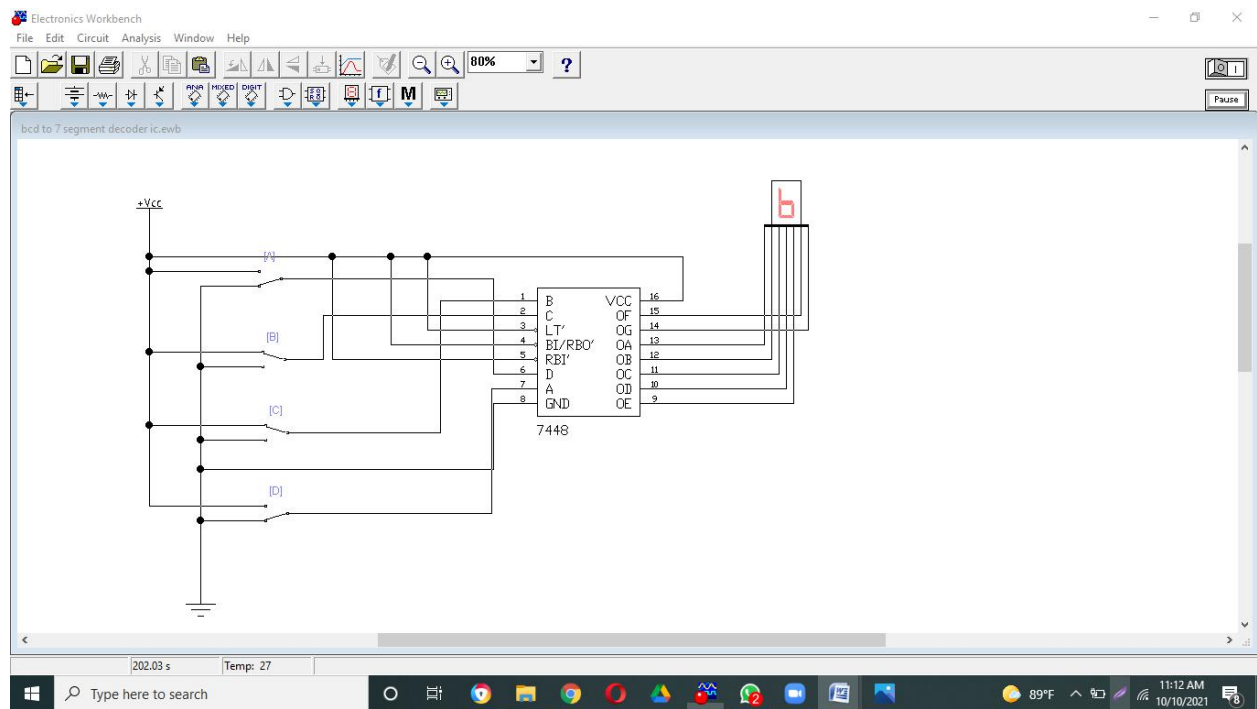
A	B	C	D	a	b	c	d	e	f	g
0	0	0	0	1	1	1	1	1	1	0
0	0	0	1	0	1	1	0	0	0	0
0	0	1	0	1	1	0	1	1	0	1
0	0	1	1	1	1	1	1	0	0	1
0	1	0	0	0	1	1	0	0	1	1
0	1	0	1	1	0	1	1	0	1	1
0	1	1	0	1	0	1	1	1	1	1
0	1	1	1	1	1	1	0	0	0	0
1	0	0	0	1	1	1	1	1	1	1
1	0	0	1	1	1	1	1	0	1	1

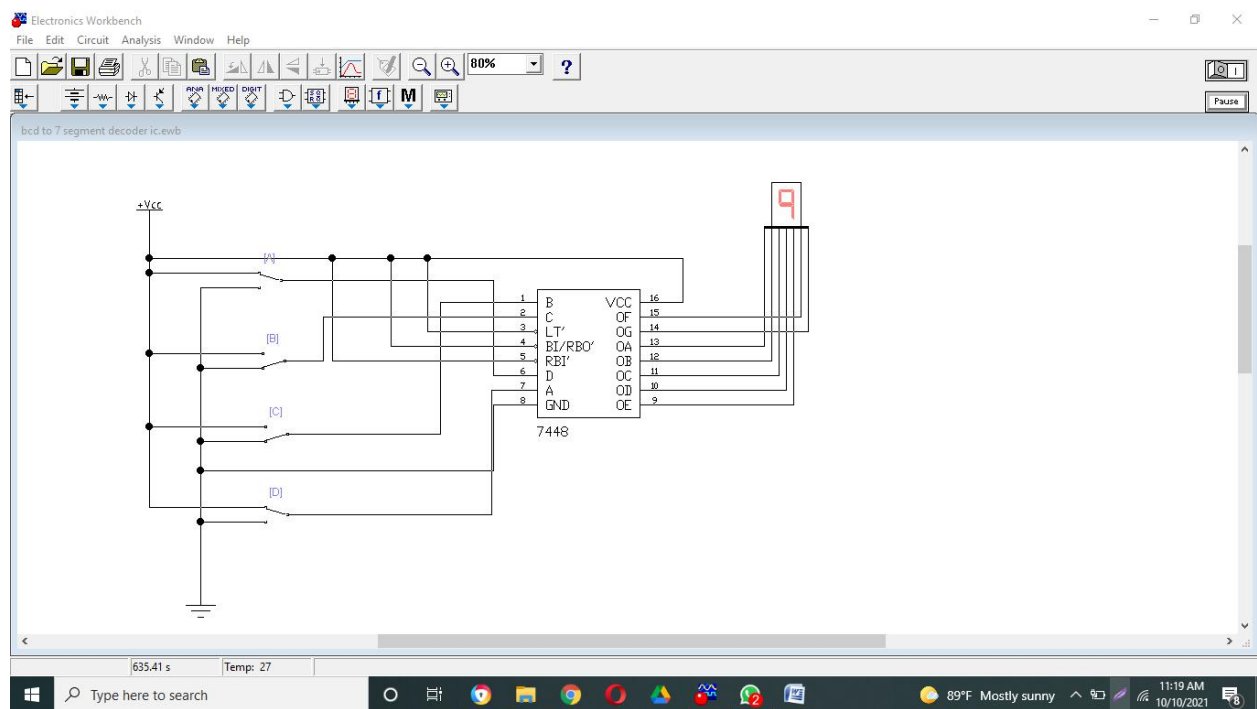
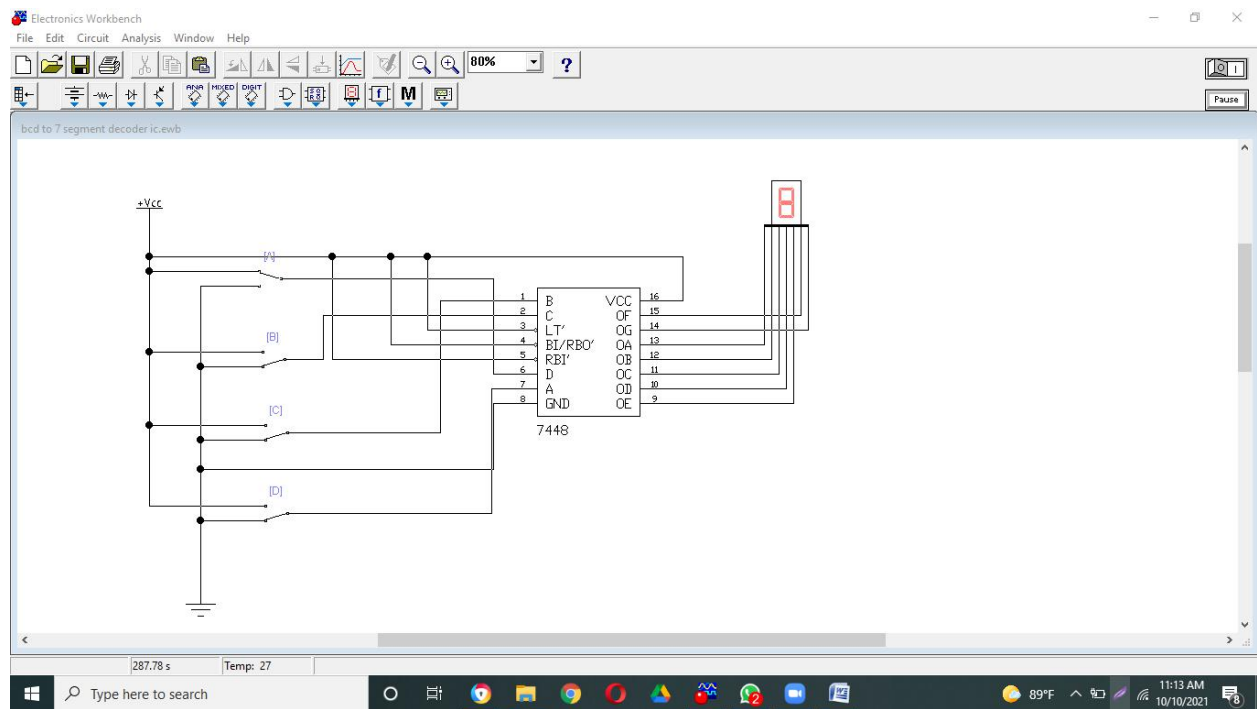
# IC level diagram:











## **Result Discussion:**

Then for a 7-segment display, we can produce a truth table giving the individual segments that need to be illuminated in order to produce the required decimal digit from 0 through 9 as shown below.