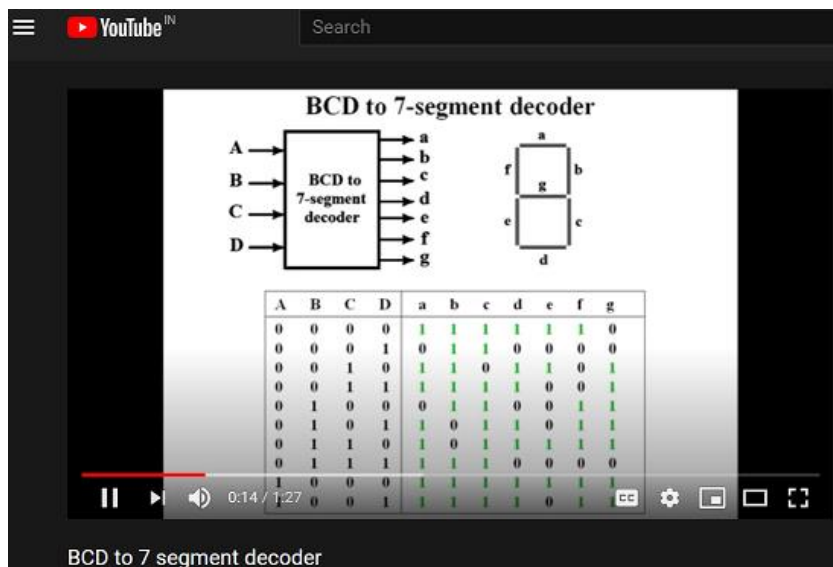
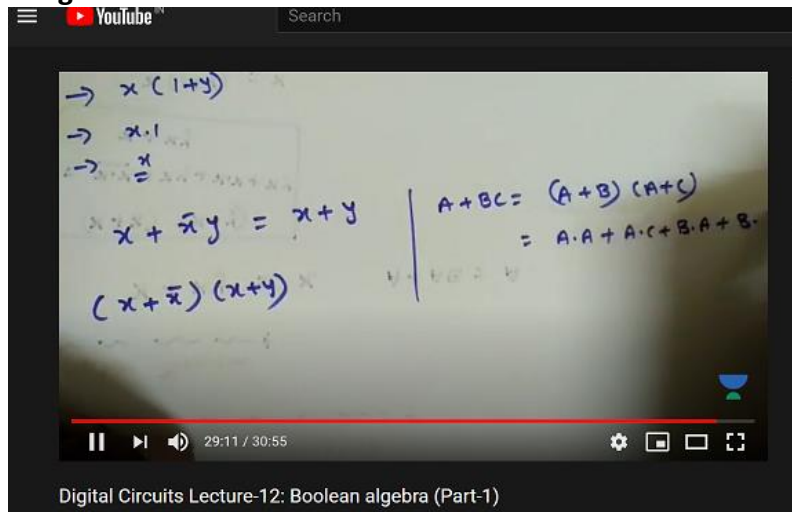


## DAILY ASSESSMENT FORMAT

Date:	28/may/2020	Name:	Sushmitha r naik
Course:	Logic Design	USN:	4a17ec090
Topic:	1. Boolean equations for digital circuits. Combinational circuits: Conversion of MUX and Decoders to logic gates. 2. design of 7 segment decoder with common anode display	Semester & Section:	6 <sup>th</sup> b
Github Repository:	Sushmitha_naik		

### FORENOON SESSION DETAILS

#### Image of session



Digital circuit : logic design  
Boolean algebra

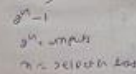
- cost of circuit → simple realization of a circuit
- large basic
- set of elements - 0, 1
- binary operator - OR & AND
- unary operator - NOT

Biotin- alginat

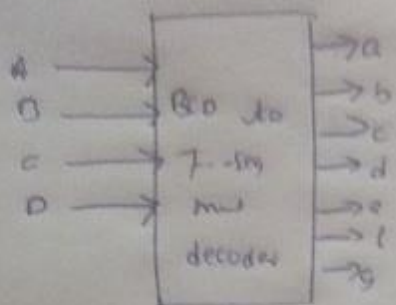
The original photograph is dated 1909.

$$\begin{array}{l|l} 2 \cdot y = y + 2 & 2 \cdot y = y + x \\ A + B = B + A & A \cdot B = B \cdot A \end{array}$$

1.  $\text{P(A|B)}$ ,  $\text{P(B|A)}$  — conditional probs
2.  $\text{MAY}$  &  $\text{Decode}$  — universal probs


$$y = \mu \bar{z} + \beta_j \quad y = l_{\bar{z}} + l_{\mu} = y_{\bar{z}}$$
$$y_2 = 0, \bar{B} + A, B$$

# Bcd to 7 segment decoder



#	B	C	D	a	b	c	d	e	f	g
0	0	0	0	1	1	1	1	1	1	0
1	0	0	1	0	1	1	0	0	0	0
2	0	0	1	1	1	0	1	1	0	1
3	0	0	1	1	1	1	1	0	0	1
4	0	1	0	0	0	1	1	0	0	1
5	0	1	0	1	1	0	1	1	0	1
6	0	1	1	0	1	0	1	1	1	1
7	0	1	1	1	1	1	1	0	0	0
8	1	0	0	0	1	1	1	1	1	1
9	1	0	0	1	1	1	1	0	1	1



## Front end interface

```
from tkinter import *
import backend

def get_selected_row(event):
    global selected_tuple
    index=list1.curselection()[0]
    selected_tuple=list1.get(index)
    e1.delete(0,END)
    e1.insert(END,selected_tuple[1])
    e2.delete(0,END)
    e2.insert(END,selected_tuple[2])
    e3.delete(0,END)
    e3.insert(END,selected_tuple[3])
    e4.delete(0,END)
    e4.insert(END,selected_tuple[4])

def view_command():
    list1.delete(0,END)
    for row in backend.view():
        list1.insert(END,row)

def search_command():
    list1.delete(0,END)
    for row in backend.search(title_text.get(),author_text.get(),year_text.get(),isbn_text.get()):
        list1.insert(END,row)

def add_command():
    backend.insert(title_text.get(),author_text.get(),year_text.get(),isbn_text.get())
    list1.delete(0,END)
    list1.insert(END,(title_text.get(),author_text.get(),year_text.get(),isbn_text.get()))

def delete_command():
    backend.delete(selected_tuple[0])

def update_command():
    backend.update(selected_tuple[0],title_text.get(),author_text.get(),year_text.get(),isbn_text.get()
    )

window=Tk()

window.wm_title("BookStore")
```

```
l1=Label(window,text="Title")
l1.grid(row=0,column=0)

l2=Label(window,text="Author")
l2.grid(row=0,column=2)

l3=Label(window,text="Year")
l3.grid(row=1,column=0)

l4=Label(window,text="ISBN")
l4.grid(row=1,column=2)

title_text=StringVar()
e1=Entry(window,textvariable=title_text)
e1.grid(row=0,column=1)

author_text=StringVar()
e2=Entry(window,textvariable=author_text)
e2.grid(row=0,column=3)

year_text=StringVar()
e3=Entry(window,textvariable=year_text)
e3.grid(row=1,column=1)

isbn_text=StringVar()
e4=Entry(window,textvariable=isbn_text)
e4.grid(row=1,column=3)

list1=Listbox(window, height=6,width=35)
list1.grid(row=2,column=0,rowspan=6,columns=2)

sb1=Scrollbar(window)
sb1.grid(row=2,column=2,rowspan=6)

list1.configure(yscrollcommand=sb1.set)
sb1.configure(command=list1.yview)

list1.bind('<<ListboxSelect>>',get_selected_row)

b1=Button(window,text="View all", width=12,command=view_command)
b1.grid(row=2,column=3)

b2=Button(window,text="Search entry", width=12,command=search_command)
b2.grid(row=3,column=3)
```

```
b3=Button(window,text="Add entry", width=12,command=add_command)
b3.grid(row=4,column=3)

b4=Button(window,text="Update selected", width=12,command=update_command)
b4.grid(row=5,column=3)

b5=Button(window,text="Delete selected", width=12,command=delete_command)
b5.grid(row=6,column=3)

b6=Button(window,text="Close", width=12,command=window.destroy)
b6.grid(row=7,column=3)

window.mainloop()
```

back end interface

```
import sqlite3
```

```
def connect():
    conn=sqlite3.connect("books.db")
    cur=conn.cursor()
    cur.execute("CREATE TABLE IF NOT EXISTS book (id INTEGER PRIMARY KEY, title text, author
text, year integer, isbn integer)")
    conn.commit()
    conn.close()
```

```
def insert(title,author,year,isbn):
    conn=sqlite3.connect("books.db")
    cur=conn.cursor()
    cur.execute("INSERT INTO book VALUES (NULL,?,?,?)" ,(title,author,year,isbn))
    conn.commit()
    conn.close()
    view()
```

```
def view():
    conn=sqlite3.connect("books.db")
    cur=conn.cursor()
    cur.execute("SELECT * FROM book")
    rows=cur.fetchall()
    conn.close()
    return rows
```

```
def search(title="",author="",year="",isbn=""):
    conn=sqlite3.connect("books.db")
```

```
cur=conn.cursor()
cur.execute("SELECT * FROM book WHERE title=? OR author=? OR year=? OR isbn=?",
(title,author,year,isbn))
rows=cur.fetchall()
conn.close()
return rows

def delete(id):
    conn=sqlite3.connect("books.db")
    cur=conn.cursor()
    cur.execute("DELETE FROM book WHERE id=?", (id,))
    conn.commit()
    conn.close()

def update(id,title,author,year,isbn):
    conn=sqlite3.connect("books.db")
    cur=conn.cursor()
    cur.execute("UPDATE book SET title=?, author=?, year=?, isbn=? WHERE
id=?", (title,author,year,isbn,id))
    conn.commit()
    conn.close()

connect()
insert("The Sun","John Smith",1918,913123132)
delete(3)
update(4,"The moon","John Smooth",1917,99999)
print(view())
print(search(author="John Smooth"))
```