

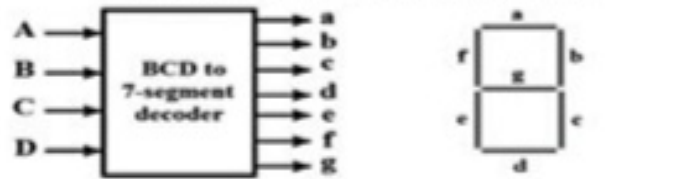
DAILY ASSESSMENT FORMAT

Date:	28-05-2020	Name:	M V Ramya
Course:	DSP	USN:	4AL17EC045
Topic:	Fourier transform	Semester & Section:	6th sem, A sec
Github Repository:	M V Ramya-045		

FORENOON SESSION DETAILS



BCD to 7-segment decoder



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
0	0	0	1	1	1	1	1	0	1	1



0:14 / 1:27



BCD to 7 segment decoder

Logic Gates

- '0' or '1'
- Cost of the circuit & simple realization of a circuit
- Boolean algebra is a system of mathematical logic
- Two Binary Operators - OR (+) & AND (·)
- Unary operator - NOT
- Boolean algebra -

$$A + A = A \quad A \cdot A = A$$

$$1 + 1 = 1 \quad 1 \cdot 1 = 1$$

$$\begin{aligned} x + 0 &= x & x \cdot 0 &= 0 \\ x + 1 &= 1 & x \cdot 1 &= x \\ x + x &= x & x \cdot x &= x \\ x + \bar{x} &= 1 & x \cdot \bar{x} &= 0 \end{aligned}$$

$$\rightarrow (\bar{\bar{x}}) \text{ or } (x')' = x$$

→ Identity Element :- The additive identity is '0'
The multiplication identity is '1'

→ Laws of Boolean Algebra -

- 1) Commutative Law :- $x + y = y + x$
 $x \cdot y = y \cdot x$
- 2) Associative Law :- $x + (y + z) = (x + y) + z$
 $x \cdot (y \cdot z) = (x \cdot y) \cdot z$
- 3) Distributive Law :- $x \cdot (y + z) = xy + xz$

* Theorem of Boolean Algebra

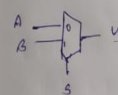
Absorption Theorem :- $A + AB = A$

$$\begin{aligned} (a) \quad x + xy &= x \\ &= x(1 + y) \\ &= x \cdot 1 \\ &= x \end{aligned} \quad \begin{aligned} (b) \quad x + \bar{x}y &= x + y \\ &= (x + \bar{x})(x + y) \\ &= 1(x + y) \\ &= x + y \end{aligned}$$

$$A + \bar{A}B = A + B$$

* MUX to logic Gates

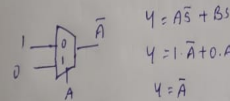
- NAND, NOR → Universal gate
- MUX and Decoders are called 'Universal logic'



S	O/P
0	A
1	B

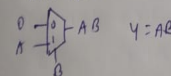
$$Y = A\bar{S} + BS$$

Inverter design



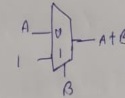
$$\begin{aligned} Y &= A\bar{S} + BS \\ Y &= 1 \cdot \bar{A} + 0 \cdot A \\ Y &= \bar{A} \end{aligned}$$

AND Gate



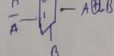
$$Y = AB$$

OR Gate



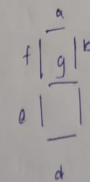
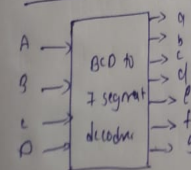
$$Y = A + B$$

EX-OR Gate



$$Y = A \oplus B$$

* BCD to 7-Segment Decoder



Date: 28 May 2020

Course: python

Topic: python

Name: MV Ramya

USN: 4AL17EC045

Semester &

6th sem Asec

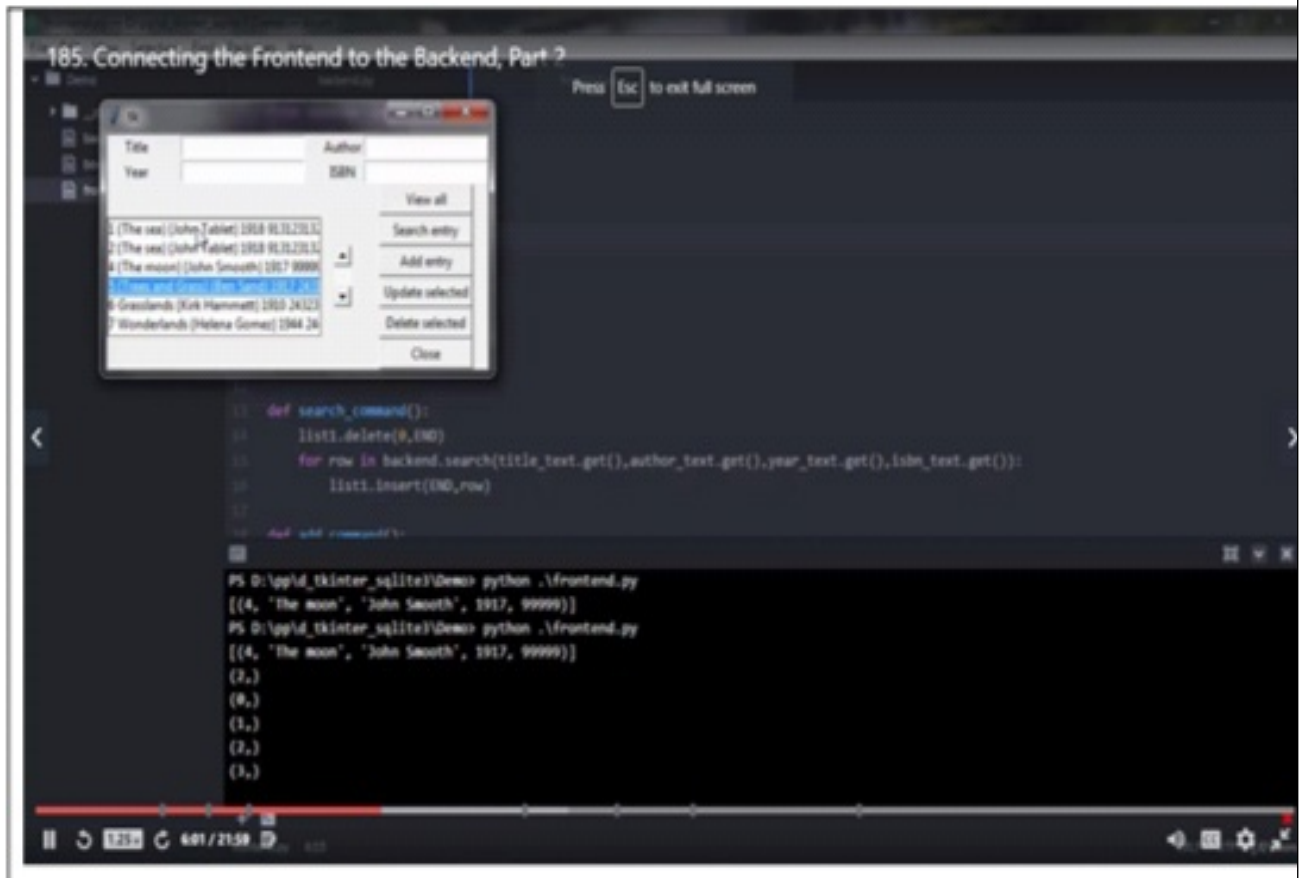


Edit with WPS Office

Section:

AFTERNOON SESSION DETAILS

Image of session



Application 5 :- Build a Desktop Database Application

Python programming which has a diverse range of options for GUI is used to build a desktop application also.

Then choosing a right package for GUI is necessary.

Tkinter can be chosen

Then we must import all the modules of the Tkinter
from Tkinter import
window = Tk()

Labels are used to create texts and images and all of that but it is important to note that it has to be a single line definition only.

```
l1 = Label(window, text = "Title")
```

```
l1.grid(column=0, row=0)
```

```
l2 = Label(window, text = "Author")
```

```
l2.grid(column=1, row=0)
```

The button widget is very similar to the label widget. We create a variable and use the widget syntax to define what the button has to say

```
bt = Button(window, text = "view all", width=12)
```

```
bt.grid(column=3, row=2)
```

The grid function which is used to set position of the button

Then we have to connect the frontend to backend using some of commands

