Daily Assessment journal

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Date: 28/5/2020

course: Logic design

Topic: Boolean eqns for digital ckts
- combinational circuits conversion of MUX & decoders to logic gates
- design of 7 segment decoder with common anode display

Github repository: jyoti_courses

forenoon session details

Report

numbers & binary variables. Hence, it is also called as binary algebra or Logical algebra.

$x+0=x$ $x+1=1$ $x+x=x$ $x+x'=1$

$x.1=x$ $x.0=0$

$x.x=x$ $x.x'=0$

combinational circuits: conversion of MUX & decoders to logic gates

- A combinational ckt is one that has a "combination of series & parallel paths for the electricity to flow. its properties are of two. in this example, the parallel section of the ckt is like a sub-ckt. & actually is part of an overall-series ckt.

1. Commutative law

$x+y=y+x$

$A+B=B+A$

2. Associative law

$x+(y+z)=(x+y)+z$

$A+(B+C)=(A+B)+C$

3. Distributive law

$x(y+z)=xy+xz$

$A(B+C)=AB+AC$

Scanned with CamScanner

Mux to logic gates

1 NAND, NOR - Universal gates

2 "Universal logic"

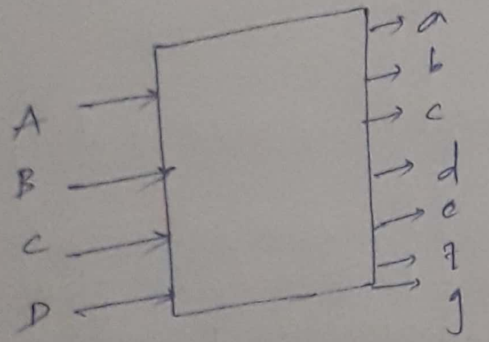
3 MUX & Decoders are called "Universal Logic"

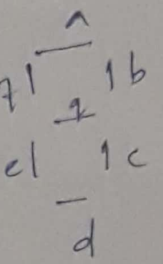
4 now we will see haw a 2:1 MUX can be used to create different logic gates

Design of 7 segment decoder with common anode display

- The use of packed BCD allows two BCD digits to be stored within a single byte of data, allowing a single data byte to hold a BCD number in the range of 00 to 99. An ex: of the 4 bit BCD i/p representing the number "4" is given below.

BCD to 7 segment display





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	0	1	1
0	1	1	1	1	1	1	0	1	0	0
1	0	0	0	1	1	1	1	0	1	1
1	0	0	1	1	1	1	1	1	1	1

Date: 26/5/2020 Name: Jyoti S Donne
Course: Python USN: 4AL17EC037
Topic: Applications: Build a decktop database application

Afternoon session details

image of session

solution

```
def get_selected_row(event):
try:
    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.detete(0,END)
    e3.insert(END,selected_tuple[3])
    e4.delete(0,END)
    e4.insert(END,selected_tuple(4))
  except Indexerror:
    pass
```

Report

Build a desktop database application: Create database

- A Database is defined as a structured set of data. so, in SQL the very first step to store the data in a well structured manner is to create a database. the CREATE DATABASE statement is used to create a new database in SQL.

- The above picture is the window created using python
- This application was about creating virtual book store by creating the window as shown ab the program was divided into two parts called frontend.py & backened.py it creates a database in which all the books are stored in database

Title Grasslands Author kirk Hammett

year 1910 ISBN 9

1 (The sea) (John Tablet) 1918913123 view all

2 (The sea) (John tablet) 1918913123 search entry

3 Grasslands (kirk Hammett) 1910 Add entry

Update selected

Delete selected

close