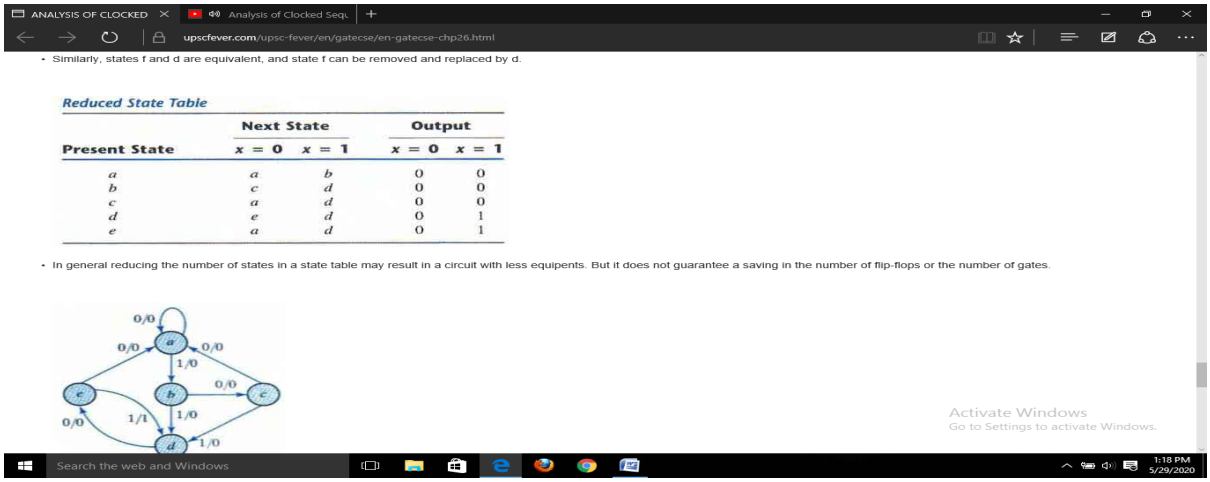
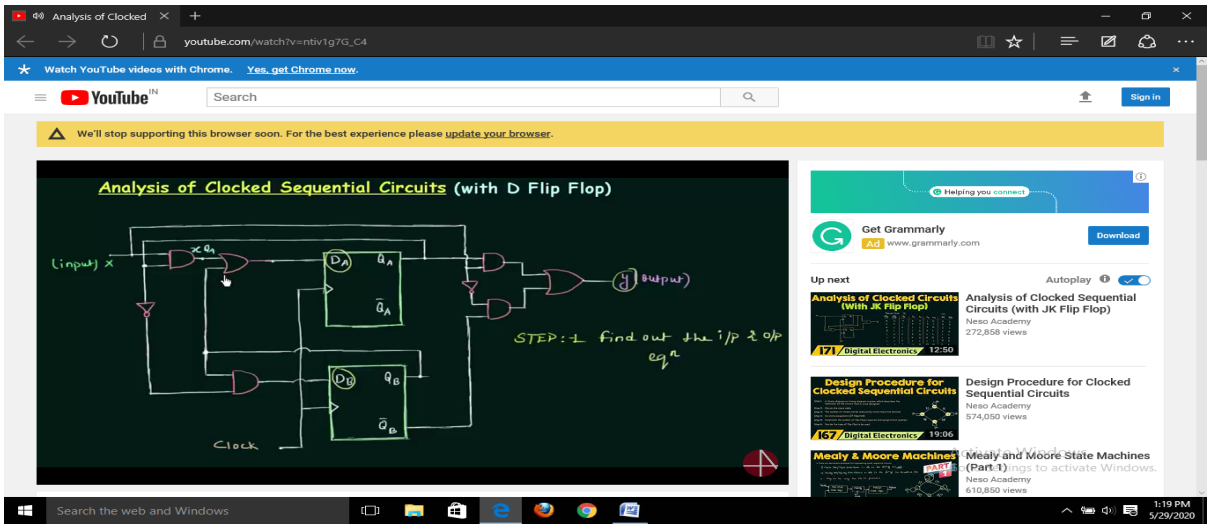
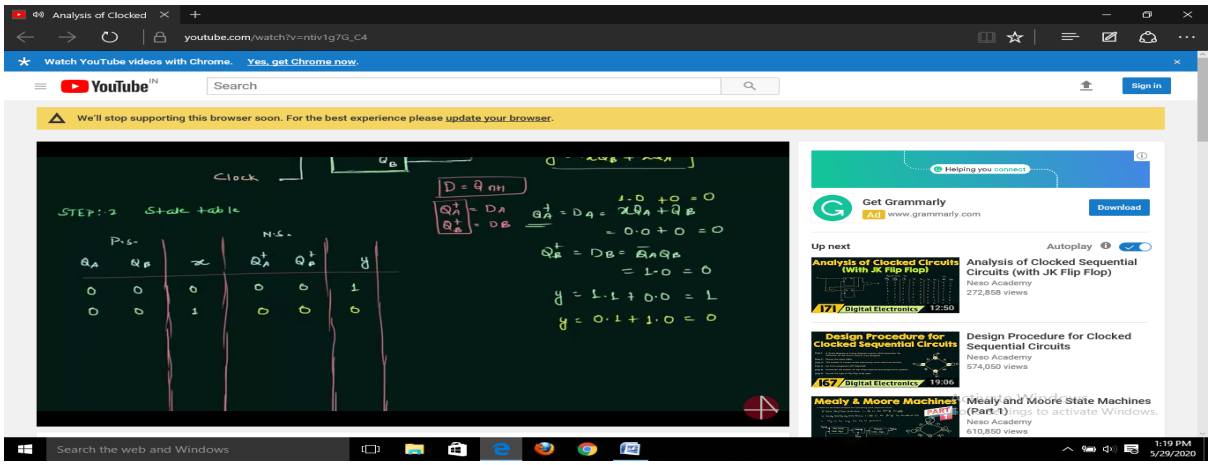
Date:	29-05-2020	Name:	Yamunashree N
Course:	Logic design	USN:	4AL17EC097
Topic:	Analysis of clocked sequential circuits, Digital clock design	Semester and section	6th sem 'B' section
Github repository:	Yamunashree-course		







Digital clock

From Wikipedia, the free encyclopedia

This article is about the appliance. For timing reference for digital audio, see Word clock.

This article **needs additional citations for verification**. Please help improve this article by adding citations to reliable sources. Unsourced material may be challenged and removed.

Find sources: "Digital clock" – news · newspapers · books · scholar · JSTOR (January 2010) (Learn how and when to remove this template message)

A **digital clock** is a type of clock that displays the time digitally (i.e. in numerals or other symbols), as opposed to an analogue clock, where the time is indicated by the positions of rotating hands.

Digital clocks are often associated with electronic drives, but the "digital" description refers only to the display, not to the drive mechanism. (Both analogue and digital clocks can be driven either mechanically or electronically, but "clockwork" mechanisms with digital displays are rare).

Basic digital alarm clock without a radio. The mark in the top-left of the display indicates that the time is 4:00pm, not 4:00am.

Contents [hide]

23/05/2020

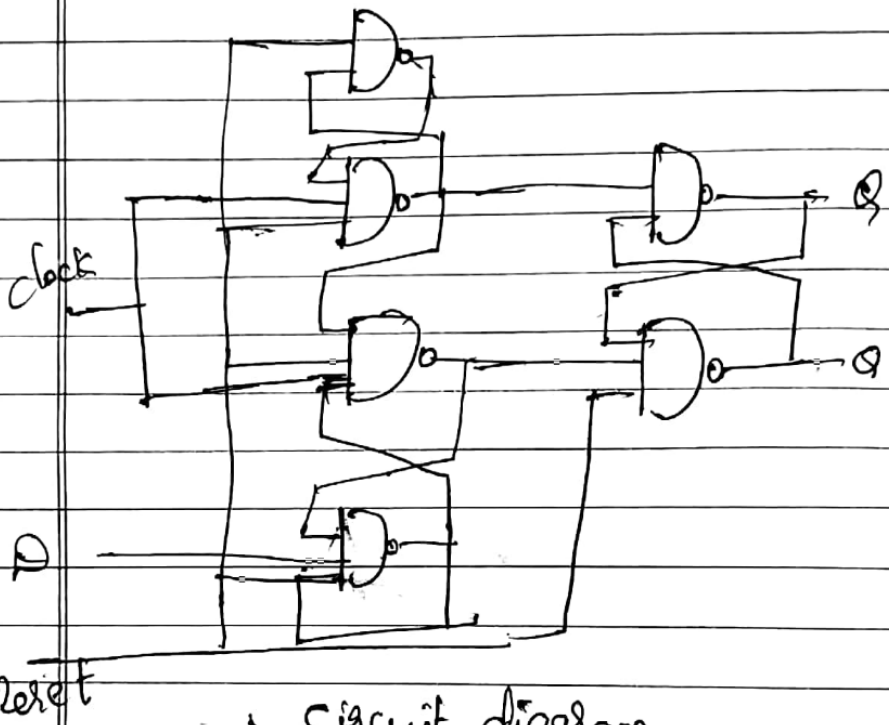
Logic Design

Day-2

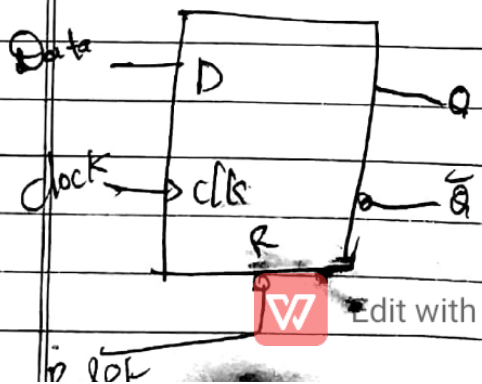
Analysis of clocked Sequential Circuits and Digital clock design

Analysis of clocked sequential circuits

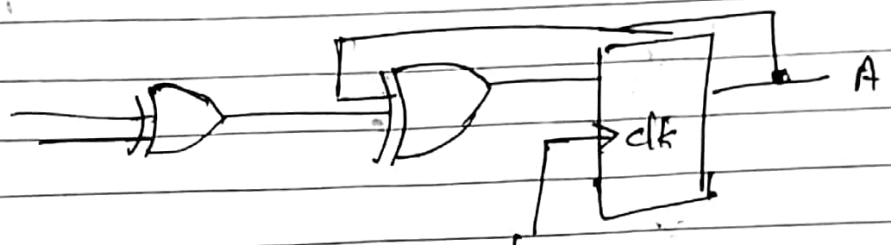
*positive edge triggered D flip flop

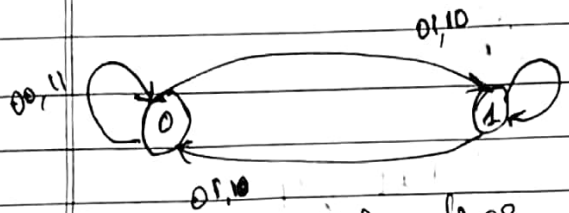


: Circuit diagram



Analysis of D Flip flop





State diagram

Present State	Inputs		Next State
A	X	Y	A
0	0	0	0
0	0	1	
0	1	0	1
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	1

Analysis with JK flip-flops

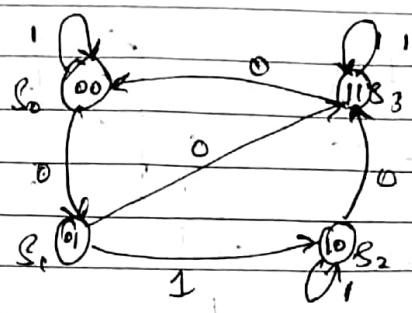
$J_A = B'$; $K_A = BX'$

$J_B = X'$; $K_B = A'X + AX' = A \oplus X$

$A(t+1) = JA' + K'A$

$B(t+1) = JB' + K'B$

$= B(t+1) = x'B + (A \oplus x)'B = B'x' + ABx + A'Bx'$



Analysis with T flip-flops

$= Q(t+1) = T \oplus Q = T'Q + TQ'$

$= T_A = Bx$

$= T_B = x$

$= y = AB$

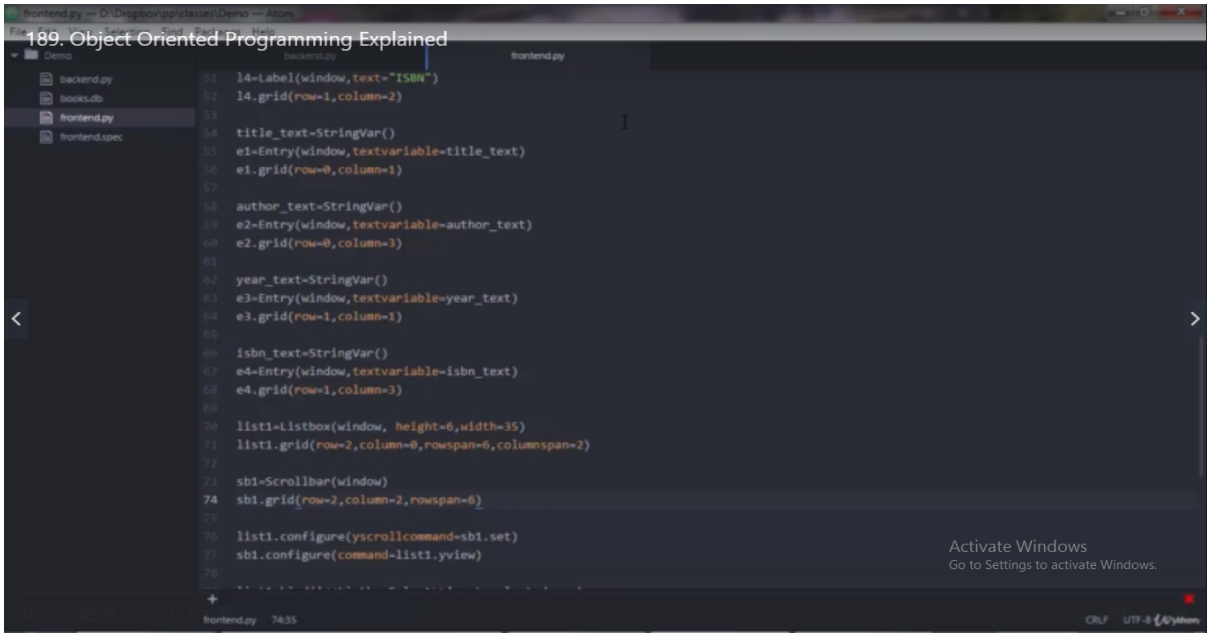
$= A(t+1) = (Bx)'A + (Bx)A' = AB' + Ax' + A'Bx$

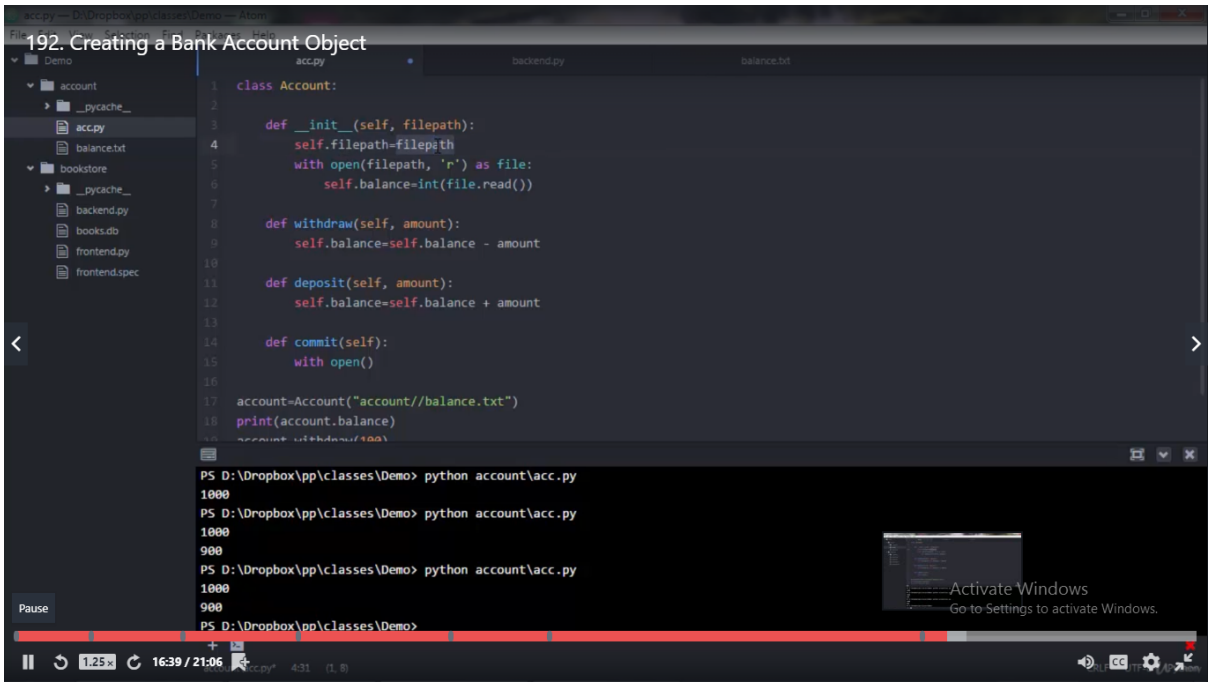
$= B(t+1) = x \oplus B$

Digital clock design

A digital clock is a type of clock that displays the time digitally, as opposed to an analogue clock, where the time is indicated by the positions of rotating hands.

Date:	29-05-2020	Name:	Yamunashree N
Course:	Python programming	USN:	4AL17EC097
Topic:	Object oriented programming	Semester and section:	6th sem and B sec





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

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

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

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

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

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

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

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

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

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

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

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

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

29/05/2020
Day-10

Object oriented programming

- Object oriented programming Explained
- Turning this Application into OOP Style part 1
- Turning this Application into OOP Style part 2
- Creating a Bank Account Object
- Inheritance
- OOP Glossary
- GUI in OOP Design (practice)
- Solution