Practical 3

Aim:

Displaying Time over 4-Digit 7-Segment Display using Raspberry Pi

Additional Hardware requires:

1. TM1637 4-digit seven segment Display board
2. Jumper wires

Pins connection

TM1637-Pin	Name	Remarks	RPi Pin	RPi Function
1	GND	Ground	6	GND
2	VCC	+5V Power	2	5V
3	DIN	Data In	38	GPIO 20
4	CLK	Clock	40	GPIO 21

Libraries needed:

tm1637.py is a driver library. Download and save it in same folder as your code.

Write following code in Python 2 IDLE save it as 'clock.py'

```
#!/usr/bin/python

import time
import datetime
import tm1637 as obj

Display = obj.TM1637(CLK=21, DIO=20, brightness=5.0)
Display.Clear()

while(True):
        now = datetime.datetime.now()
        hour = now.hour
        minute = now.minute
        second = now.second
        Display.Clear()
        val = [(int(hour / 10)), (hour % 10), (int(minute / 10)), (minute % 10) ]
        Display.Show(val)
        Display.ShowDoublepoint((second % 2))
        time.sleep(0.25)
```

Output: