**Lab Exercise**

***Hardware:***

Solder 4-digit 7-segment display to I2C backpack

see instruction given in :

<http://learn.adafruit.com/adafruit-led-backpack/0-dot-56-seven-segment-backpack>

Be sure you put the 7-segment chip in the correct way into the I2C backpack. Make sure the leads are not shorted. You can apply solder tip from outside of the pins (away from the chip) to minimize chance of shorting.

Connect I2C backpack to RPi

***Software:***

Display RPisystem time.

Follow the direction given by Adafruit

<http://learn.adafruit.com/matrix-7-segment-led-backpack-with-the-raspberry-pi/overview>

1.Configure your Rpifor I2C

<http://learn.adafruit.com/adafruits-raspberry-pi-lesson-4-gpio-setup/configuring-i2c>

2.Downloading the Code from Github

<http://learn.adafruit.com/matrix-7-segment-led-backpack-with-the-raspberry-pi/using-the-adafruit-library>

3.Run the sample code: ex\_7segment\_clock.py to see if it works.