lab 5 - 7 segment display

common anode - power

The individual segments are illuminated by applying a ground, logic "0" or "LOW"

common cathode - ground

The individual segments are illuminated by the application of a "HIGH", or logic "1"

```
import RPi.GPIO as GPIO
import time
import os, sys
GPIO.setwarnings(False)
GPIO.setmode(GPIO.BOARD)
#setup output pins
GPIO.setup(35, GPIO.OUT)       //GPIO19
GPIO.setup(12, GPIO.OUT)       //GPIO18
GPIO.setup(36, GPIO.OUT)       //GPIO16
GPIO.setup(33, GPIO.OUT)       //GPIO13
GPIO.setup(32, GPIO.OUT)       //GPIO12
GPIO.setup(38, GPIO.OUT)       //GPIO20
GPIO.setup(40, GPIO.OUT)       //GPIO21

#define 7 segment digits
digitclr=[1,1,1,1,1,1,1]
digit0=[0,0,0,0,0,0,1]
digit1=[1,0,0,1,1,1,1]
digit2=[0,0,1,0,0,1,0]
digit3=[0,0,0,0,1,1,0]
digit4=[1,0,0,1,1,0,0]
digit5=[0,1,0,0,1,0,0]
digit6=[0,1,0,0,0,0,0,]
digit7=[0,0,0,1,1,1,1]
digit8=[0,0,0,0,0,0,0]
digit9=[0,0,0,1,1,0,0,]
gpin=[35,12,36,33,32,38,40]
#routine to clear and then write to display
def digdisp(digit):
for x in range (0,7):
GPIO.output(gpin[x], digit[x])
#routine to display digit from 0 to 9
digdisp(digit0)
time.sleep(1)
digdisp(digit1)
time.sleep(1)
digdisp(digit2)
```

```
time.sleep(1)
digdisp(digit3)
time.sleep(1)
digdisp(digit4)
time.sleep(1)
digdisp(digit5)
time.sleep(1)
digdisp(digit6)
time.sleep(1)
digdisp(digit7)
time.sleep(1)
digdisp(digit8)
time.sleep(1)
digdisp(digit9)
time.sleep(1)
#tidy up
GPIO.cleanup()
import sys
sys.exit()
```