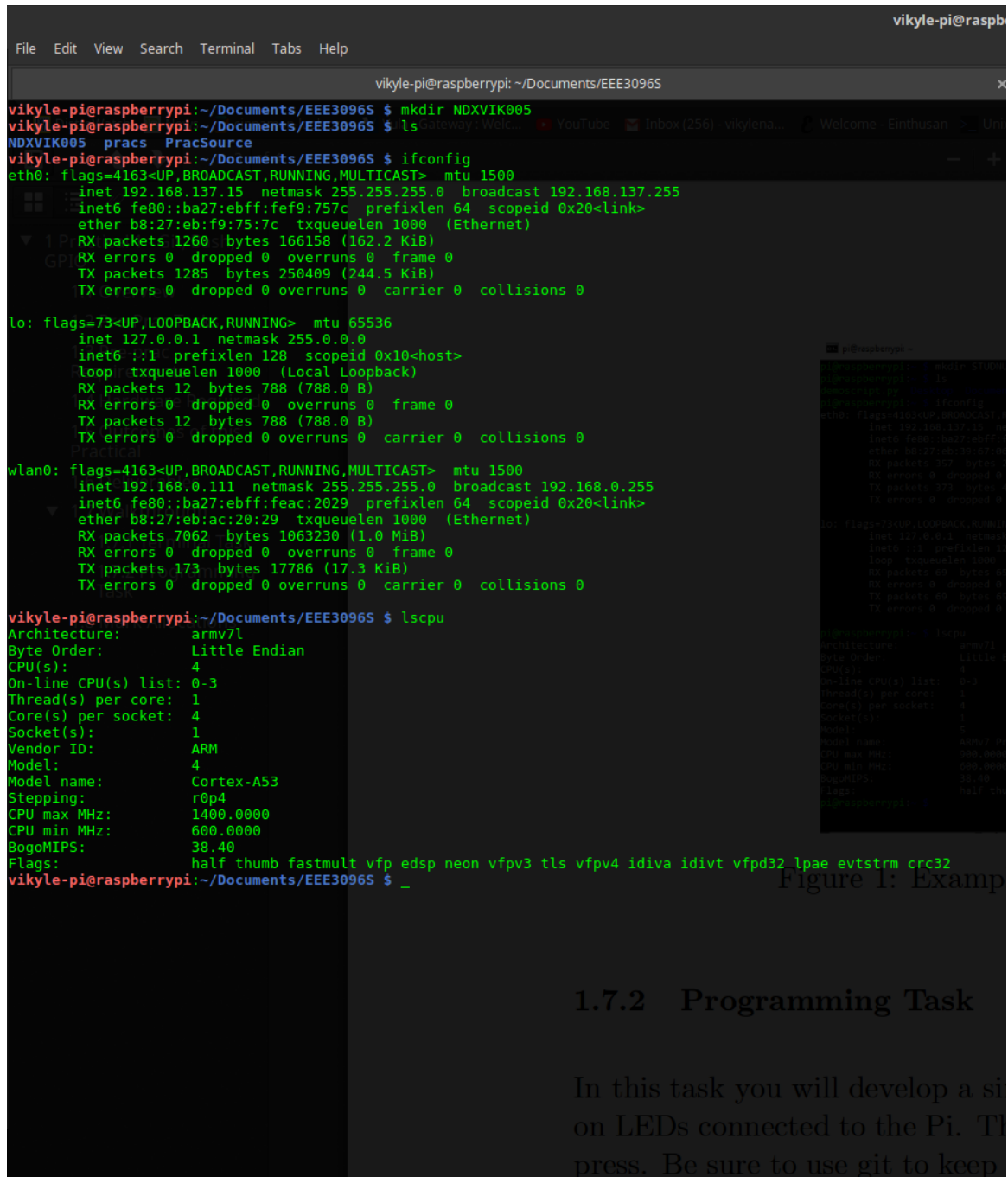


Vikyle Naidoo NDXVIK005: EEE3096S Prac 1

github repo: <https://github.com/vikylenaidoo/EEE3096S-pracs>



```
vikyle-pi@raspberrypi: ~/Documents/EEE3096S
vikyle-pi@raspberrypi:~/Documents/EEE3096S $ mkdir NDXVIK005
vikyle-pi@raspberrypi:~/Documents/EEE3096S $ ls
gateway  prakc  PrakSource
vikyle-pi@raspberrypi:~/Documents/EEE3096S $ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.137.15 netmask 255.255.255.0 broadcast 192.168.137.255
    inet6 fe80::ba27:ebff:fe9:757c prefixlen 64 scopeid 0x20<link>
    ether b8:27:eb:f9:75:7c txqueuelen 1000 (Ethernet)
    RX packets 1260 bytes 166158 (162.2 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 1285 bytes 250409 (244.5 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 12 bytes 788 (788.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 12 bytes 788 (788.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

wlan0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.0.111 netmask 255.255.255.0 broadcast 192.168.0.255
    inet6 fe80::ba27:ebff:feac:2029 prefixlen 64 scopeid 0x20<link>
    ether b8:27:eb:ac:20:29 txqueuelen 1000 (Ethernet)
    RX packets 7062 bytes 1063230 (1.0 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 173 bytes 17786 (17.3 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

vikyle-pi@raspberrypi:~/Documents/EEE3096S $ lscpu
Architecture: armv7l
Byte Order: Little Endian
CPU(s): 4
On-line CPU(s) list: 0-3
Thread(s) per core: 1
Core(s) per socket: 4
Socket(s): 1
Vendor ID: ARM
Model: 4
Model name: Cortex-A53
Stepping: r0p4
CPU max MHz: 1400.0000
CPU min MHz: 600.0000
BogoMIPS: 38.40
Flags: half thumb fastmult vfp edsp neon vfpv3 tls vfpv4 idiva idivt vfpd32 lpae evtstrm crc32
vikyle-pi@raspberrypi:~/Documents/EEE3096S $
```

Figure 1: Example

1.7.2 Programming Task

In this task you will develop a simple program that controls LEDs connected to the Pi. The program will be triggered by a button press. Be sure to use git to keep