ASSIGNMENT – 3

# BlinkingLights.py

import RPi.GPIO as GPIO from time import sleep

PIN = 8

GPIO.setmode(GPIO.BCM) GPIO.setup(PIN, GPIO.OUT) GPIO.output(PIN, GPIO.LOW)

while True:

GPIO.output(8, GPIO.HIGH)

sleep(2)

GPIO.output(8, GPIO.LOW)

sleep(2)

# Traffic Lights.py

import RPi.GPIO as GPIO from time import sleep

from signal, SIGINT import signal import sys

GPIO.setmode(GPIO.BCM) GPIO.setup(9, GPIO.OUT) # RED GPIO.setup(10, GPIO.OUT) # AMBER GPIO.setup(11, GPIO.OUT) # GREEN

def allLightsOff(signal, frame): GPIO.output(9, False) GPIO.output(10, False) GPIO.output(11, False) GPIO.cleanup()

sys.exit(0)

signal(SIGINT, allLightsOff) # Turns of all lights on interruption

while True:

# Turn on Red GPIO.output(9, True) sleep(10)

# Turn of Red and enable Green GPIO.output(9, False) GPIO.output(11, True)

sleep(5)

# Turn off Green and enable Amber GPIO.output(11, False) GPIO.output(10, True)

sleep(2)

# Turn off Amber GPIO.output(10, False)

# Loops again from red