Assignment 3

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| Maximum Mark | 2 |

Questions-1:

How to blink led using raspberry pi?

Solution:

import RPi.GPIO as GPIO

import time

ledPin = 22

def setup():

GPIO.setmode(GPIO.BOARD)

GPIO.setup(ledPin, GPIO.OUT)

GPIO.output(ledPin, GPIO.LOW)

def loop():

while True:

print 'LED on'

GPIO.output(ledPin, GPIO.HIGH)

time.sleep(1.0)

print 'LED off'

GPIO.output(ledPin, GPIO.LOW)

time.sleep(1.0)

def endprogram():

GPIO.output(ledPin, GPIO.LOW)

GPIO.cleanup()

if \_\_name\_\_ == '\_\_main\_\_':

setup()

try:

loop()

except KeyboardInterrupt:

endprogram()

Question-2

How to blink traffic light using raspberry pi?

Solution:

from gpiozero import Button, TrafficLights, Buzzer

from time import sleep

buzzer = Buzzer(15)

button = Button(21)

lights = TrafficLights(25, 8, 7)

while True:

button.wait\_for\_press()

buzzer.on()

light.green.on()

sleep(1)

lights.amber.on()

sleep(1)

lights.red.on()

sleep(1)

lights.off()

buzzer.off()