Assignment -3 Python Programming for Raspberry pi

Assignment Date	October 6, 2022
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Maximum Marks	2 Marks

Question.1) Write python code for Blinking LED using Raspberry pi?

import RPi.GPIO as GPIO # Import Raspberry Pi GPIO library

from time import sleep # Import the sleep function from the time module

GPIO.setwarnings(False) # Ignore warning for now

GPIO.setmode(GPIO.BOARD) # Use physical pin numbering

GPIO.setup(8, GPIO.OUT, initial=GPIO.LOW) # Set pin 8 to be an output pin and set initial value to low (off).

while True: #RUN forever

GPIO.output(8, GPIO.HIGH)# Turn on

sleep(1) # Sleep for 1 second

GPIO.output(8, GPIO.LOW) # Turn off

sleep(1) # Sleep for 1 second

Question.2) Write python code for Traffic lights using Raspberry pi?

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()