 

Python Programming

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| Maximum Marks | 2 Marks |

Write python code for blinking LED and Traffic lights for Raspberry pi.



import RPi.GPIO as GPIO import time

try:

def lightTraffic(led1, led2, led3,delay ): GPIO.output(led1,1)

time.sleep(delay) GPIO.output(led1,0) GPIO.output(led2,1) time.sleep(delay) GPIO.output(led2,0) GPIO.output(led3,1) time.sleep(delay) GPIO.output(led3,0)

GPIO.setmode(GPIO.BCM) button=19

GPIO.setup(button,GPIO.IN,pull\_up down=GPIO.PUD\_UP)

ledGreen =16 ledYellow=12 ledRed=23

GPIO.setup(ledGreen,GPIO.OUT)

GPIO.setup(ledYellow,GPIO.OUT) GPIO.setup(ledRed,GPIO.OUT)

While True:

input\_state = GPIO.input(button) if input\_state == False:

print('Button Pressed') lightTraffic(ledGreen, bledYellow, ledRed,1)

else: GPIO.output(ledGreen,0) GPIO.output(ledYellow,0)

GPIO.output(ledRed,0) except KeyboardInterrupt:

Print "You've exited the program" finally:

GPIO.cleanup()

 :

Import RPi.GPIO as GPIO # Import Raspberry PiGPIO 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 pi 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