IOTL Practicals

Lab Practical 6

Problem Statement:

Create a program that illuminates the green LED if the counter is less than 100, illuminate the yellow LED if the counter is between 101 and 200 and illuminates the red LED if the counter is greater than 200.

//Code:

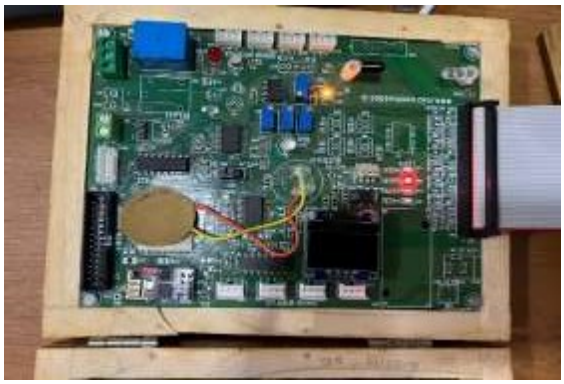
```
import time
from gpiozero import LED
led1 = LED(7)
led2 = LED(22)
led3 = LED(23)
number=0

while True:
    time.sleep(0.2)
    if number<=100:
        led1.off()
        led2.on()
        led3.on()
    elif number>201 and number<=300:
        led1.on()
        led2.off()
        led3.on()
    elif number>101 and number<=200:
        led1.on()
        led2.on()
        led3.off()

    number=number+1
```

OUTPUT:

When counter value is less than 100.

When counter value is more than 200

When counter value is between 100 and 200



Lab Practical 7

Problem Statement:

Create a program so that when the user enters ‘b’ the green light blinks, ‘g’ the green light is illuminated ‘y’ the yellow light is illuminated and ‘r’ the red light is illuminated.

//Code:

```
import time
from gpiozero import LED
led1 = LED(7)
led2 = LED(22)
led3 = LED(23)
led4 = LED(25)

led1.on()
led2.on()
led3.on()
led4.on()

key=input("Enter Character")
print(key)

while True:
    time.sleep(0.2)
    key=input("Enter Character")
    print (key)
    if key=='g' or key=='G':
        led1.off()
        led2.on()
        led3.on()
        led4.on()
    elif key=='r' or key=='R':
        led1.on()
        led2.off()
        led3.on()
        led4.on()
    elif key=='y' or key=='Y':
        led1.on()
        led2.on()
        led3.off()
        led4.on()
    else :
        led1.on()
        led2.on()
        led3.on()
        led4.on()
```

OUTPUT:

when user enters the ‘g’

when user enters ‘y’

when user enters ‘r’

Lab Practical 8

Problem Statement:

Write a program that asks the user for a number and outputs the number squared that is entered.

//Code:

```
Num=int(input("Enter the number:"))
sq=num*num
print("The square of ",num," is: ",sq)
```

OUTPUT: