IOT PRACTICAL CODE

Practical-1

(BLINK OF SINGLE LED)

```
import RPi.GPIO as GPIO
import time
GPIO.setmode(GPIO.BOARD)
GPIO.setup(7,GPIO.OUT)
for i in range(10):
        GPIO.output(7,True)
        print("LED IS FINALLY ON")

        time.sleep(1)

        GPIO.output(7,False)
        print("LED IS OFF")

        time.sleep(1)
print("PROGRAM COMPLETE!")
GPIO.cleanup()
```

Practical-2

CAPTURE-IMAGE:

```
from picamera2 import Picamera2
import time

picam2 = Picamera2()
picam2.start()
time.sleep(2)
picam2.capture_file(‘image.jpg')
picam2.stop()
print("image captures")
```

PREVIEW-IMAGE:

```
from picamera2 import Picamera2
from picamera2 import Preview
import time

picam2 = Picamera2()

preview_config = picam2.create_preview_configuration()
picam2.configure(preview_config)
picam2.start_preview(Preview.QTGL)

picam2.start()
time.sleep(10)
picam2.stop()
```

VIDEO:

```
from picamera2 import Picamera2
import time

picam2 = Picamera2()

video_config = picam2.create_video_configuration()
picam2.configure(video_config)

picam2.start()
picam2.start_recording("video.h264")
time.sleep(10)
picam2.stop_recording()
picam2.stop()
print("video saved")
```

PRACTICAL-3

(4 LED PATTERN)

```
import RPi.GPIO as GPIO
import time

GPIO.setmode(GPIO.BOARD)
GPIO.setup(3, GPIO.OUT)
GPIO.setup(5, GPIO.OUT)
GPIO.setup(7, GPIO.OUT)
GPIO.setup(8, GPIO.OUT)

while True:
    GPIO.output(3, 1)
    GPIO.output(5, 1)
    GPIO.output(7, 1)
    GPIO.output(8, 0)
    time.sleep(2)
    GPIO.output(3, 0)
    GPIO.output(5, 0)
    GPIO.output(7, 1)
    GPIO.output(8, 1)
    time.sleep(1)
```

PRACTICAL-4

(TIME)

GITHUB-LINK:raspberrypi-examples/actor-led-7segment-4numbers at master • timwaizenegger/raspberrypi-examples (github.com)