**NANDHA ENGINEERING COLLEGE**

Question:

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

## CODE 1:

**LED BLINKING**

import RPi.GPIO as GPIO import time GPIO.setmode(GPIO.BCM) cnt = 0

MAIL\_CHECK\_FREQ = 1

RED\_LED = 4 GPIO.setup(RED\_LED, GPIO.OUT)

while True:

if cnt == 0 :

GPIO.output(RED\_LED, False) cnt = 1

else:

GPIO.output(RED\_LED, True) cnt = 0

time.sleep(MAIL\_CHECK\_FREQ) GPIO.cleanup()

# CODE 2:

**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, ledYellow, 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()