ASSIGNMENT - 3

PYTHON PROGRAMMING

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| **ASSIGNMENT DATE** | 17 November,2022 |
| **Team ID** | PNT2022TMID20858 |
| **Project Name** | Smartfarmer-IOT Enable Smart farming Application |

# QUESTION 1

Write python code for Blinking led and traffic lights for Raspberry Pi

**CODE:**

**BLINKING OF LED ( RGB LED )**

import RPi.GPIO as GPIO from time import sleep GPIO.setmode(GPIO.BOARD) GPIO.setup(8,GPIO.OUT) GPIO.setup(12,GPIO.OUT)

GPIO.setup(10,GPIO.OUT) for x in range(5): GPIO.output(8,True) print("RED IS ON") sleep(2)

GPIO.output(8,False) print("RED IS OFF")

sleep(2)

GPIO.output(12,True) print("Green IS ON") sleep(2)

print("GREEN IS OFF")

sleep(2) GPIO.output(10,True) print("BLUE IS ON")

sleep(2)

GPIO.output(10,False) print("BLUE IS oFF")

sleep(2)

# TRAFFIC LIGHT

import RPi.GPIO as GPIO from time import sleep GPIO.setmode(GPIO.BOARD) GPIO.setup(7,GPIO.OUT) GPIO.setup(11,GPIO.OUT) GPIO.setup(13,GPIO.OUT)

while True: GPIO.output(7,True) print("RED is ON") sleep(3)

GPIO.output(7,False) print("RED is OFF") GPIO.output(11,True) print("YELLOW is ON") sleep(1) GPIO.output(11,False); print("YELLOW is OFF") GPIO.output(13,True) print("GREEN is ON") sleep(3)

print("GREEN is OFF") GPIO.cleanup()