

Assignment -1

Python Program

Assignment Date	16 September 2022
Student Name	Mr. Vishva
Student Roll Number	621319205059
Maximum Marks	2 Marks

Question-1:

Write a program in Thinkercard Make a smart home automation , using 2+ sensors , LED , Buzzer in a single code and circuit .

Program:

```
import sys
import time
import signal
import RPi.GPIO as GPIO
GPIO.setmode(GPIO.BCM)
GPIO.setup(9, GPIO.OUT)
GPIO.setup(10, GPIO.OUT)
GPIO.setup(11, GPIO.OUT)
def allLightsOff(signal, frame):
    GPIO.output(9, False)
    GPIO.output(10, False)
    GPIO.output(11, False)
    GPIO.cleanup()
    sys.exit(0)
signal.signal(signal.SIGINT, allLightsOff)
while True:
    # Red
    GPIO.output(9, True)
    time.sleep(3)
    # Red and yellow
    GPIO.output(10, True)
    time.sleep(1)
    # Green
    GPIO.output(9, False)
    GPIO.output(10, False)
    GPIO.output(11, True)
    time.sleep(5)
    # yellow
    GPIO.output(11, False)
    GPIO.output(10, True)
    time.sleep(2)
    # yellow off (red comes on at top of loop)
    GPIO.output(10, False)
```