

Name: SABIKA BATOOL ZAIDI.

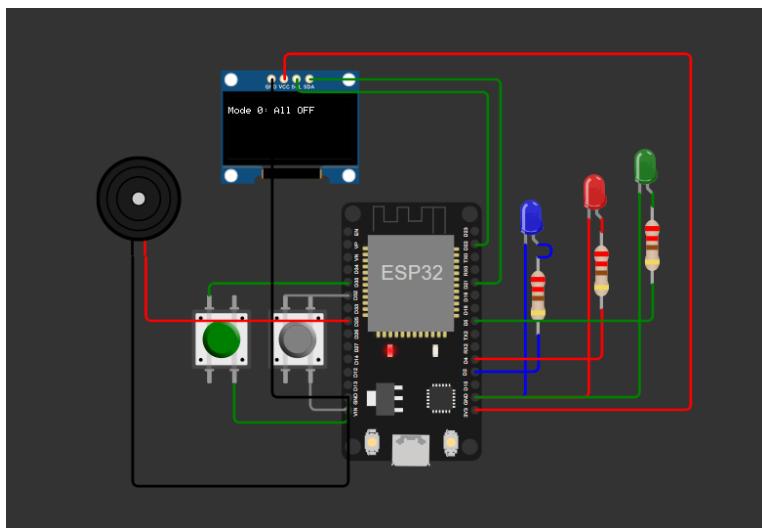
Class: BS-AI 5TH semester.

Reg.No.: 23-NTU-CS-1282.

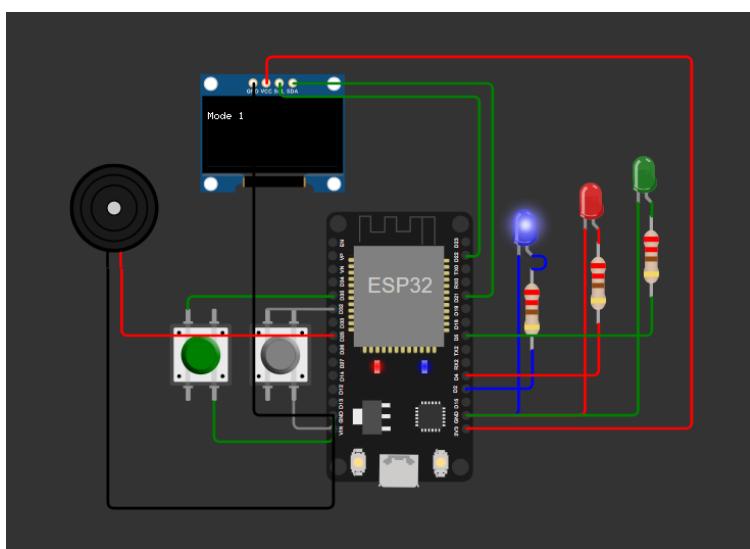
SCREENSHOTS :

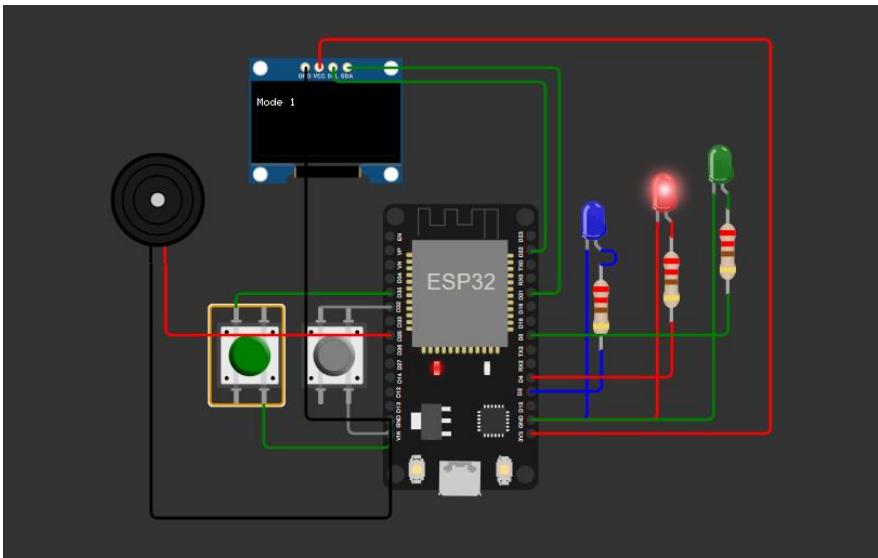
Task A:

Mode 0 all LEDs are off

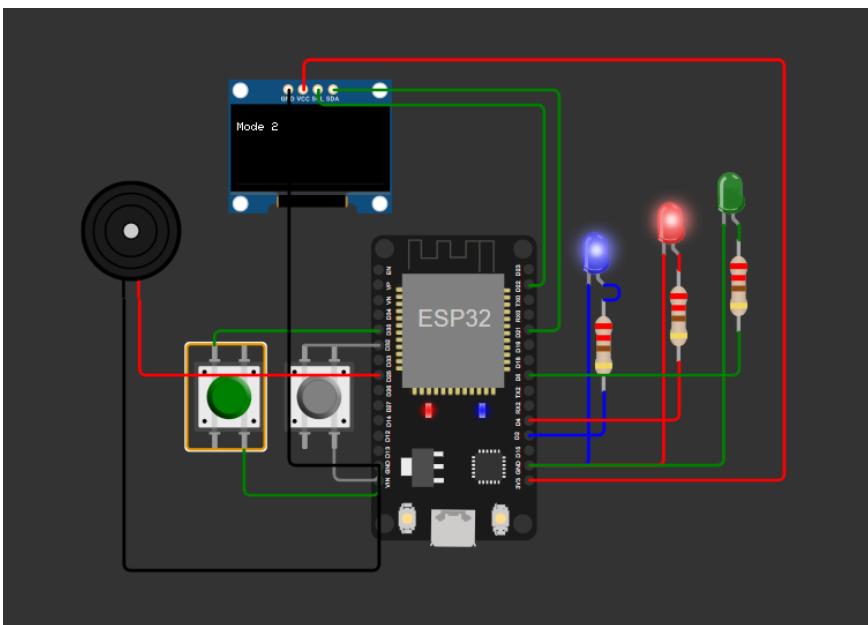


Mode 1 after pressing button 1 LED1 and LED2 starts to blink alternatively.

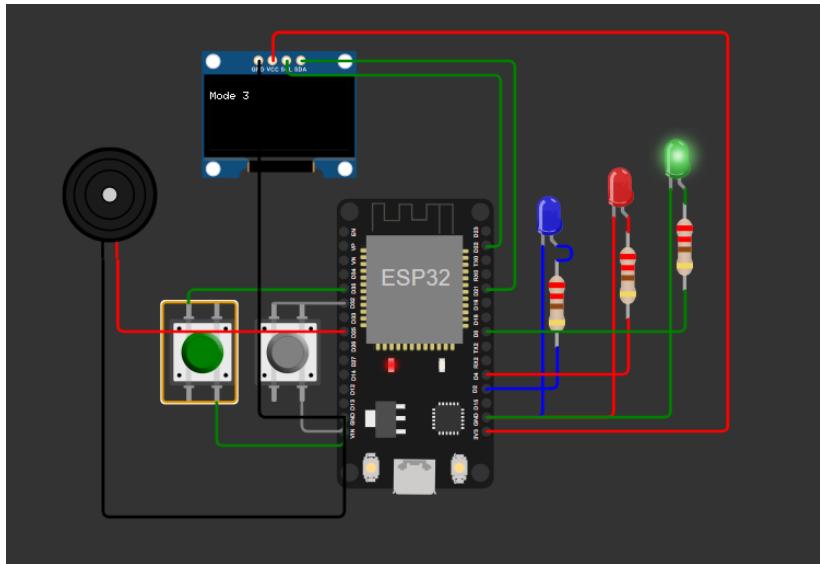




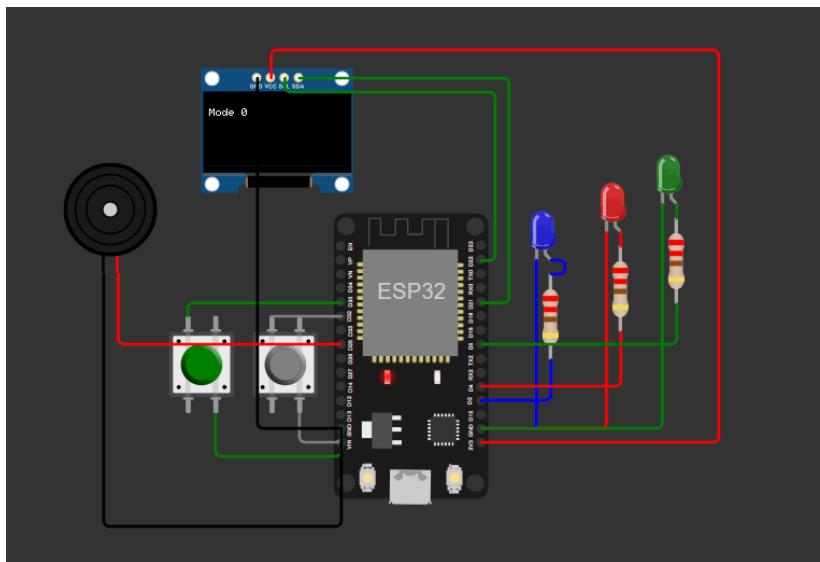
Mode 2 both 1st and 2nd leds ON.



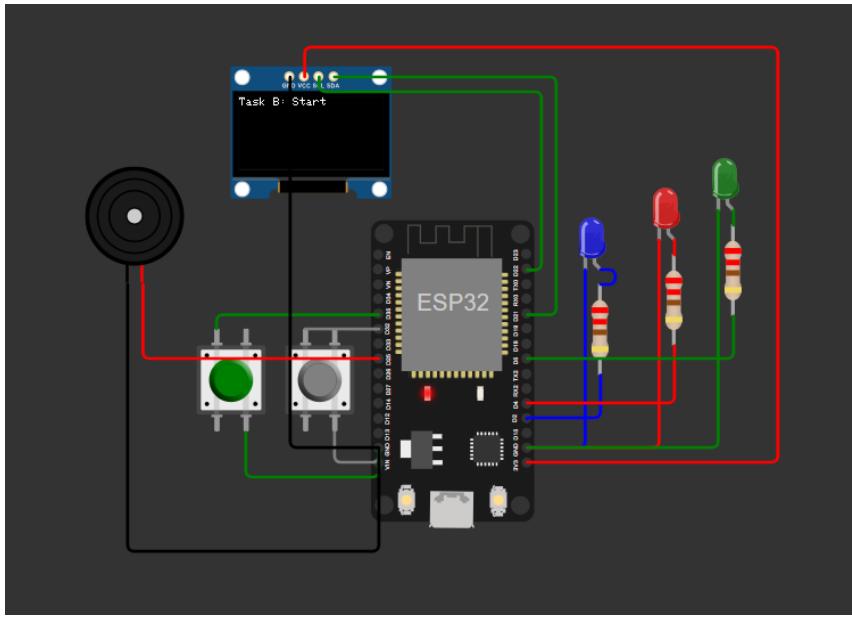
Mode 3 3rd led starts to fade in and out (pwm)



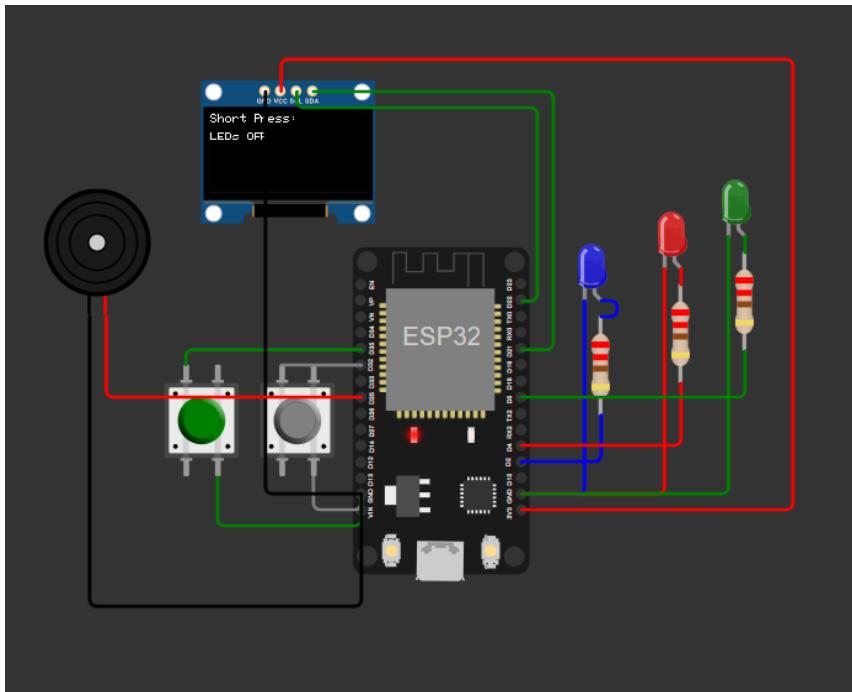
Pressing button 2 mode resets to mode 0.

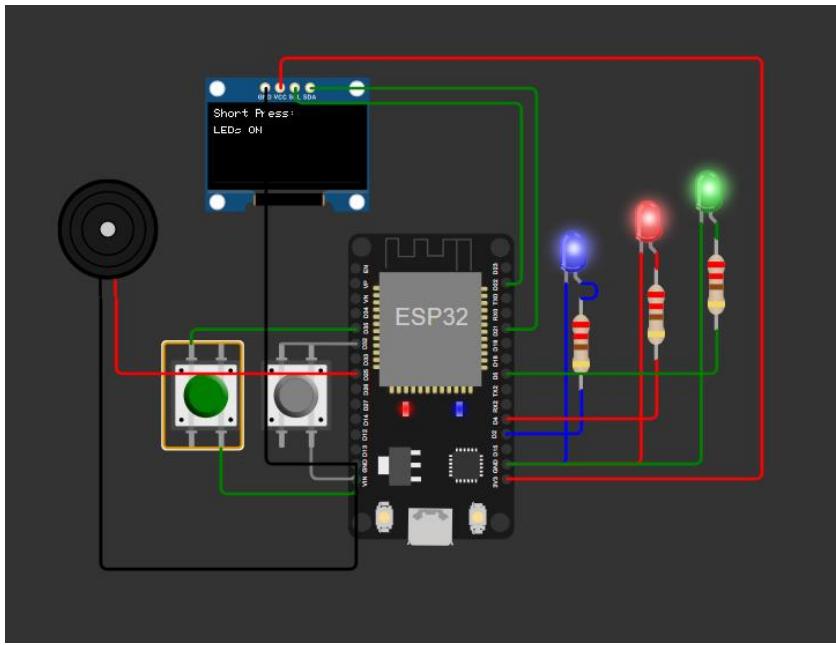


Task B :

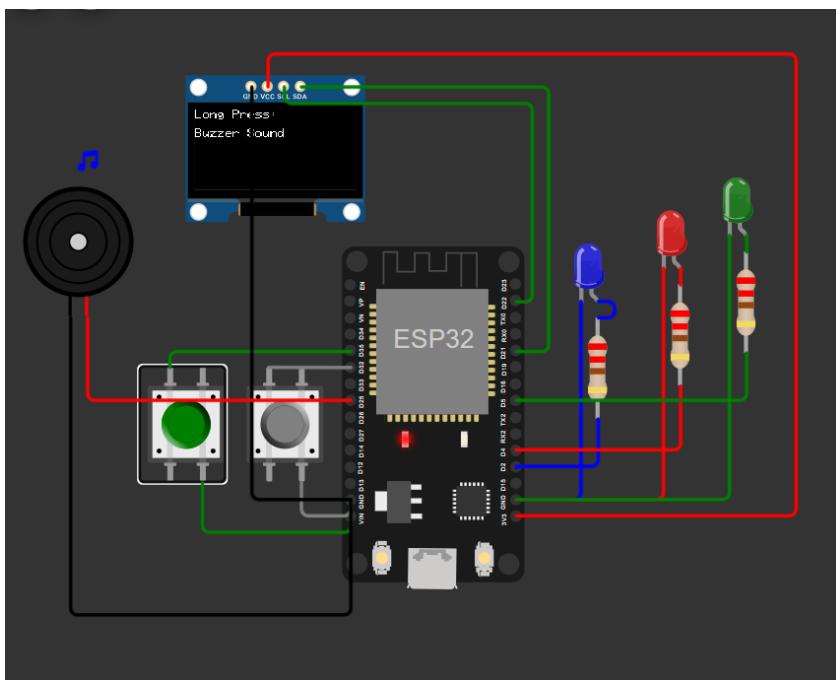


Short press on button 1 toggles all leds

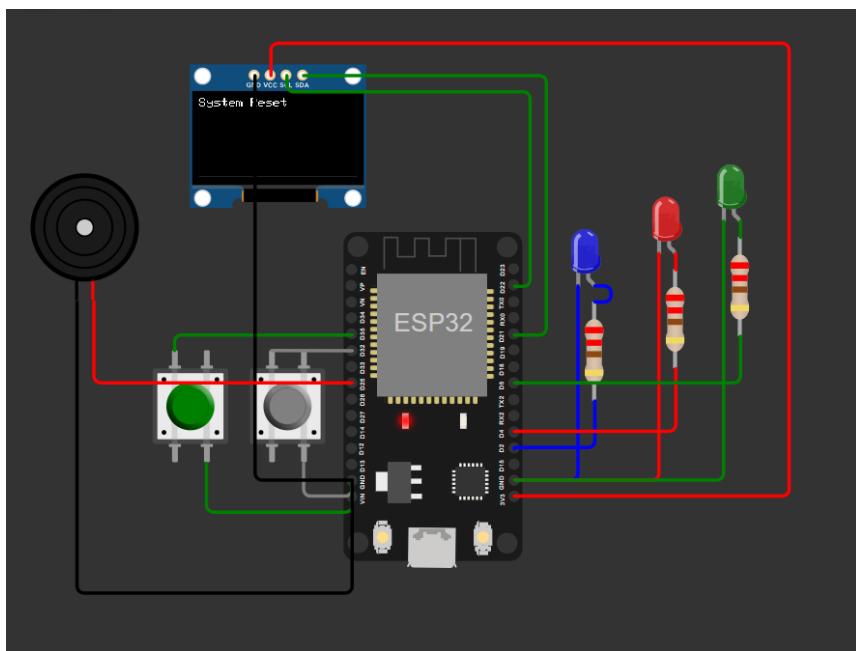




Long press on button 1 (>1.5s) causes buzzer to play for 0.6 s.



Pressing button 2 causes turn off of leds and buzzer.



WOKWI LINKS :

Task A: <https://wokwi.com/projects/445884287779897345>

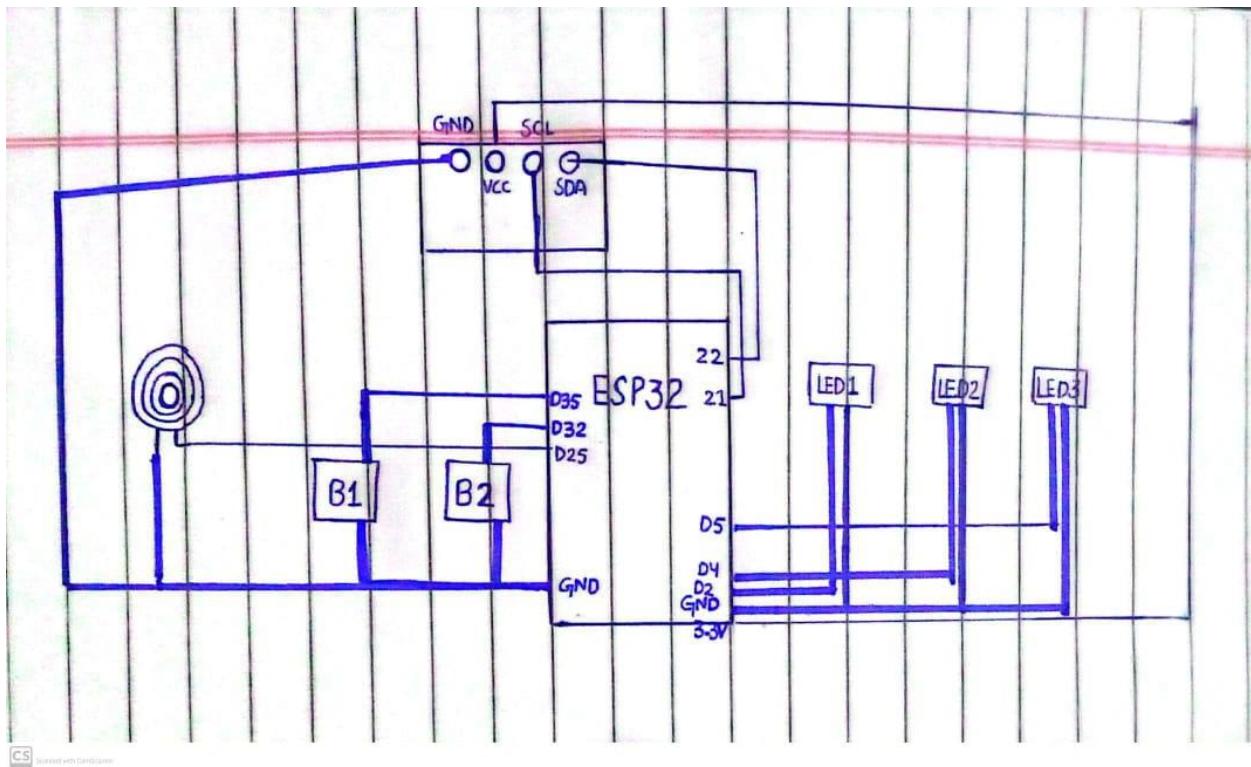
Task B: <https://wokwi.com/projects/445889308284953601>

PIN MAP:

Blue LED	D2	Output
Red LED	D4	Output
Green LED	D5	Output
Button 1	D35	Input
Button 2	D32	Input
Buzzer	D25	Output
OLED SDA	D21	I ² C Data
OLED SCL	D22	I ² C Clock
OLED VCC	3V3	Power

OLED GND GND Ground

DIAGRAM:



GITHUB REPOSITORY LINK:

<https://github.com/Sabika-Batool-Zaidi/IOT-practical>