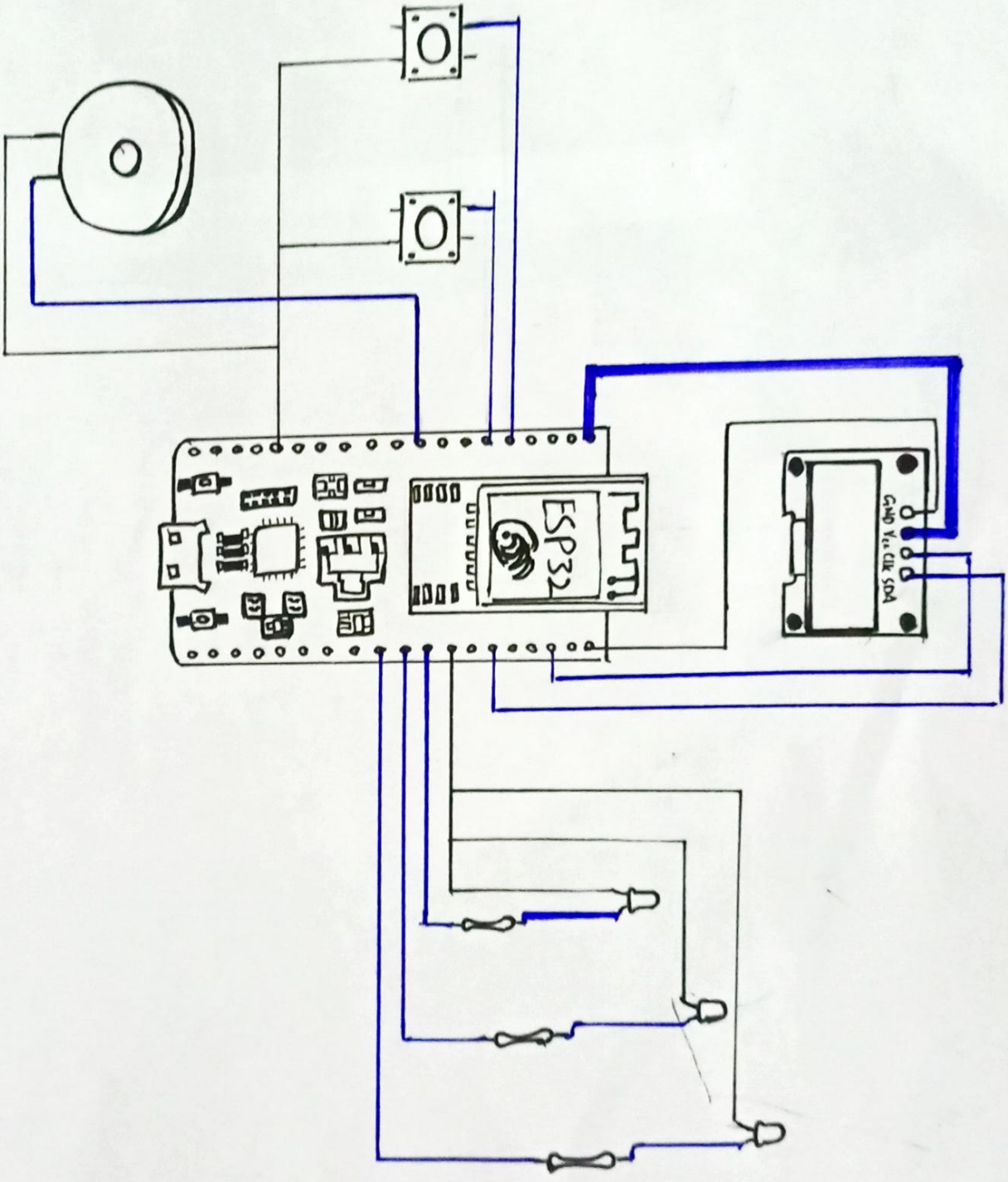
Task-B

Date: _____

```
// Library
#include <Arduino.h>
#include <Wire.h>
#include <Adafruit_GFX.h>
#include <Adafruit_SSD1306.h>
// Initializing
#define Led1 18
#define btn 25
#define Buzzer 14
// OLED
#define Screen_Width 128
#define Screen_Height 64
Adafruit_SSD1306 display(Screen_Width, Screen_Height, &Wire);

unsigned long btnPressTime = 0;
bool btnPressed = false;
bool ledState = LOW;

const unsigned long longPressTime = 1500;

void setup() {

  pinMode(Led1, Output);
  pinMode(Buzzer, Output);
  pinMode(Btn, Input_PULLUP);

  digitalWrite(Led1, ledState);
  digitalWrite(Buzzer, LOW);
```

```
display.begin(SSD1306_SWITCHCAPVCC, 0x3C);
display.clearDisplay();
display.setTextSize(2);
display.setTextColor(SSD1306_White);
display.setCursor(0,0);
display.println("Ready....");
display.display();
}

void Loop()
{
  bool btnState = (digitalRead(BTN) == LOW);

  if (btnState && !ButtonPressed)
  {
   unsigned long pressDuration = millis() - btnPress;
  }
    if (pressDuration >= LongPressTime)
    {
      digitalWrite(Led1, LOW);
      tone(Buzzer, 1000, 200);

      display.clearDisplay();
      display.setCursor(0,0);
      display.println("Long Press Detected");
      display.display();
    }
  else
    {
```

```
ledState = !ledState;
digitalWrite(LedI, ledState);

display.clearDisplay();
display.setCursor(0, 0);
display.println("Short Press Detected!");
display.display();
}

buttonPressed = false;
}
}
```


ESP32
GND Vcc Clk SDA