

EXECUTION :

The screenshot shows a Raspberry Pi Pico IDE with a Python script for a fire alarm system. The script is named `ssd1306.py` and is located in the `fire.py` file. The script uses a `while True:` loop to continuously check the flame sensor. If the sensor detects a flame (value == 0), it turns on the buzzer and displays "FIRE ALERT!" on the OLED display. If no flame is detected, it turns off the buzzer and displays "SAFE". The script includes comments explaining the logic and uses `time.sleep()` for delays.

```

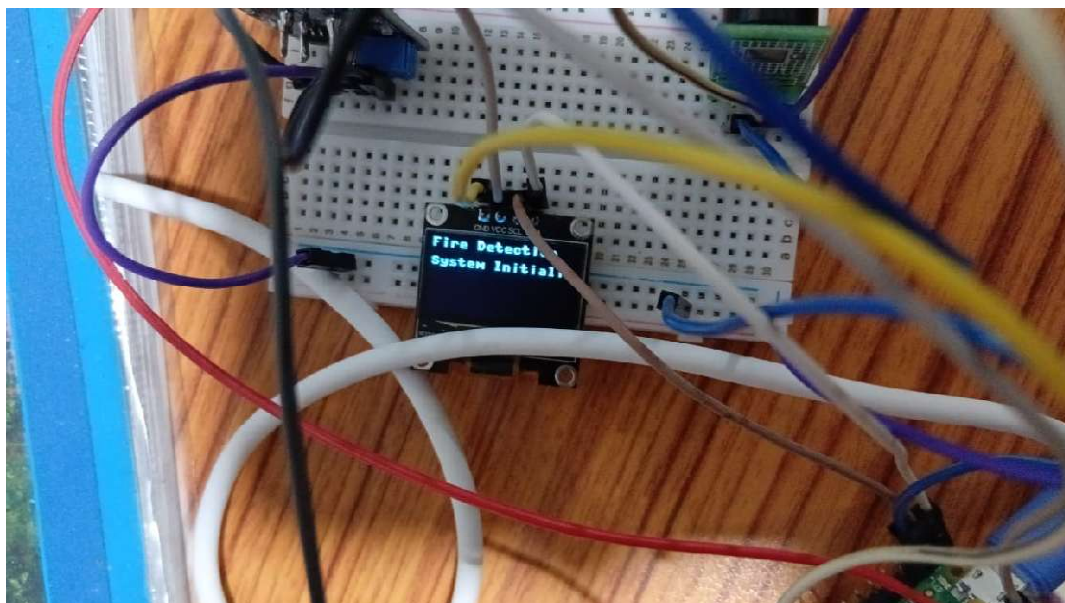
19 time.sleep(4)
20
21 # == Main Loop ==
22 while True:
23     if flame_sensor.value() == 0:  # LOW means fire detected
24         buzzer.value(0)           # Buzzer ON
25         oled.fill(0)
26         oled.text("🔥 FIRE ALERT!", 0, 20)
27         oled.show()
28         print("FIRE ALERT!")
29         print(flame_sensor.value())
30     else:
31         buzzer.value(1)           # Buzzer OFF
32         oled.fill(0)
33         oled.text("SAFE", 40, 20)
34         oled.show()
35         print("SAFE")
36         print(flame_sensor.value())
37
38 time.sleep(0.2)
39
40

```

The IDE interface shows the file explorer on the left with the project structure:

- ssd1306.py
- fire.py
- from transformers
- main.py
- project
- project.2

The bottom status bar indicates the IDE is running MicroPython on a Raspberry Pi Pico, connected to a Board CDC @ COM4.



Thonny - Raspberry Pi Pico 2 / fire.py @ 32:21

File Edit View Run Tools Help

Files [ssd1306.py] [fire.py] [main.py]

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- VirtualBox VMs
- fire.py
- from transformers ir
- main.py
- project
- project 2

Raspberry Pi Pico

- lib
- fire.py
- gasensor.py
- main.py
- oled.py
- sh1106.py
- ssd1306.py

```
19 time.sleep(4)
20
21 # === Main Loop ===
22 while True:
23     if flame_sensor.value() == 1: # LOW means fire detected
24         buzzer.value(1) # Buzzer ON
25         oled.fill(0)
26         oled.text("🔥 FIRE ALERT!", 0, 20)
27         oled.show()
28         print("FIRE ALERT!")
29         print(flame_sensor.value())
30     else:
31         buzzer.value(0) # Buzzer OFF
32         oled.fill(0)
33         oled.text("SAFE", 40, 20)
34         oled.show()
35         print("SAFE")
36         print(flame_sensor.value())
37
38 time.sleep(0.2)
39
40
```

Shell

```
1
1 FIRE ALERT!
1
1 FIRE ALERT!
1
1 FIRE ALERT!
1
1 FIRE ALERT!
1
```

MicroPython (Raspberry Pi Pico) • Board CDC @ COM4

34°C Partly sunny

Search

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