**Practical 01**

**Displaying different LED patterns with Raspberry Pi.**

from gpiozero import LED, DistanceSensor

from time import sleep

led = LED(18)

sensor = DistanceSensor(echo=24, trigger=23, max\_distance=2.0)

try:

while True:

distance\_cm = sensor.distance \* 100 # convert to cm

print(f"Distance: {distance\_cm:.2f} cm")

if distance\_cm <= 10:

led.on()

sleep(0.5)

led.off()

sleep(0.5)

else:

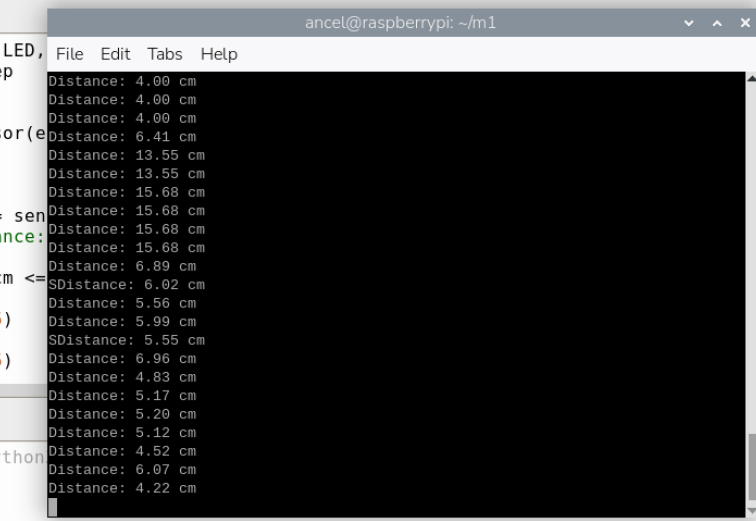
led.off()

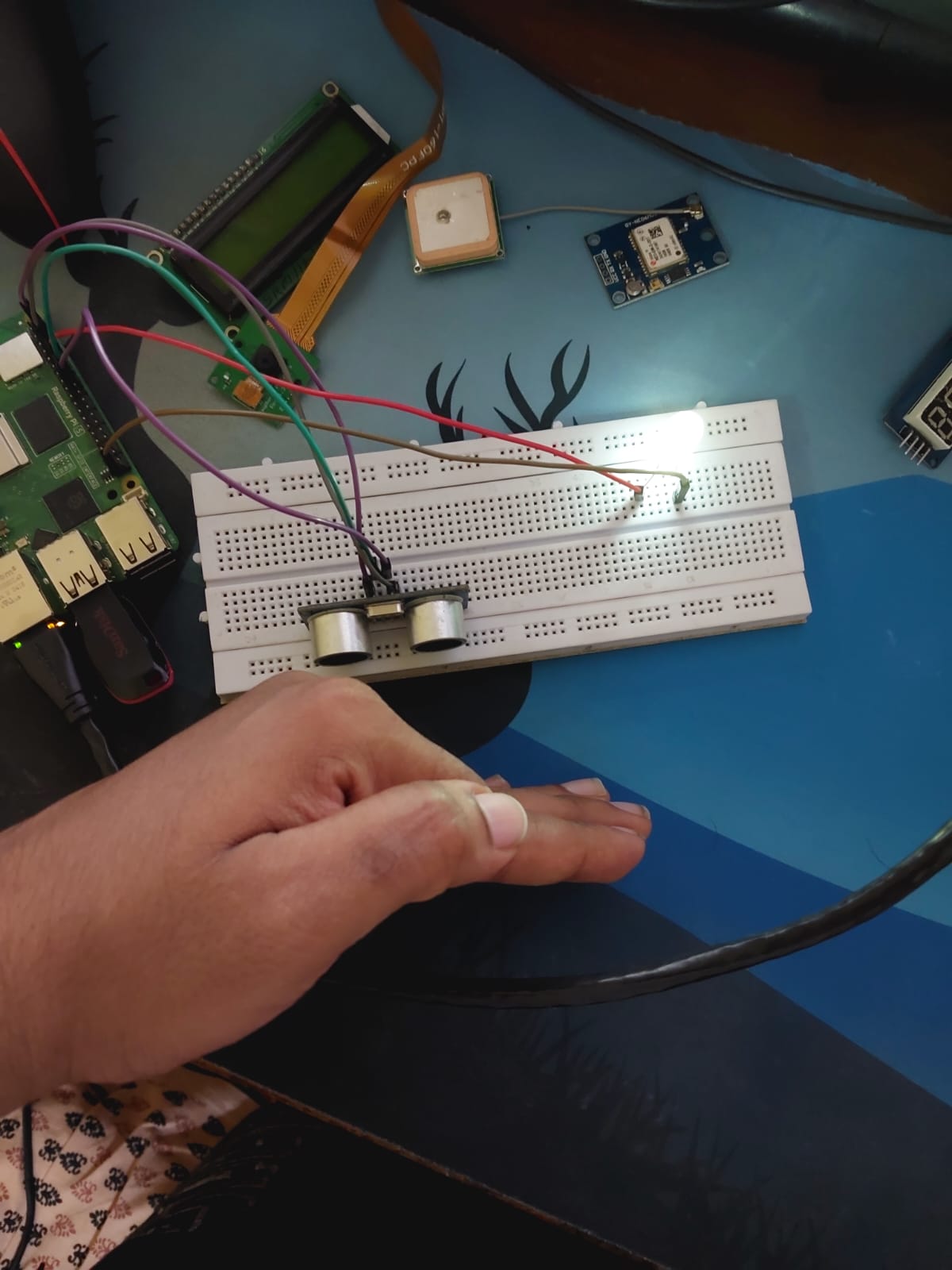
sleep(0.1)

except KeyboardInterrupt:

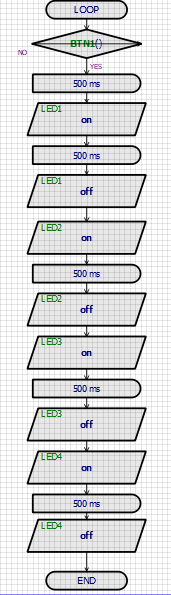
print("Exiting.")

Output:





**In proteus :**

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**Output:**

