Lab Experiments on Raspberry Pi

1. When a specific key F on the keyboard is pressed, turn the fan ON using the relay module, and when L is pressed turn the LED ON.
2. Continuously monitor temperature. If the temperature is above a specific threshold, flip the relay to turn on the fan, and also alert using LED.
3. When motion is detected, blink the LED 5 times rapidly, and then keep the LED continuously ON. The LED should remain ON until no motion has been detected for more than 10 seconds, after which the LED should turn OFF.
4. If motion is detected, measure the temperature and compare it with a specific threshold. If the temperature exceeds the threshold, activate the relay to turn ON the fan and keep it running until the temperature falls below the threshold. If no motion is detected, do not sense the temperature and keep the fan turned OFF.