```
#include<Arduino.h>
const int lm35Pin = A0;   // LM35 sensor connected to analog pin A0
const int ledPin = 13;    // Onboard LED connected to digital pin 13

unsigned long previousMillis = 0;  // Variable to store the last time LED was updated
const long interval1 = 250;       // Interval for LED blink when temp < 30°C
const long interval2 = 500;       // Interval for LED blink when temp >= 30°C

int ledState = LOW;   // Initialize the LED state
int temperature = 0;  // Variable to store temperature

void setup() {
  pinMode(ledPin, OUTPUT);  // Set the LED pin as output
  Serial.begin(9600);       // Initialize serial communication
}

void loop() {
  temperature = readTemperature();  // Read temperature from LM35 sensor

  if (temperature < 30) {
    blinkLED(interval1);  // Blink LED every 250ms
  } else {
    blinkLED(interval2);  // Blink LED every 500ms
  }
}

// Function to read temperature from LM35 sensor
int readTemperature() {
  int sensorValue = analogRead(lm35Pin);  // Read sensor value
  float voltage = sensorValue * (5000 / 1024.0);  // Convert sensor value to voltage
  int tempC = voltage / 10;  // Convert voltage to temperature in Celsius
```

```
  return tempC;  // Return temperature
}

// Function to blink LED with specified interval
void blinkLED(long interval) {
  unsigned long currentMillis = millis();  // Get the current time

  if (currentMillis - previousMillis >= interval) {
    previousMillis = currentMillis;  // Save the last time LED was updated
    ledState = !ledState;           // Toggle LED state

    digitalWrite(ledPin, ledState);  // Update LED state
  }
}
```