

Sachin--Assignment code

```
#include <TimerOne.h>

const int sensorPin = A0;
const int ledPin = 13;
volatile bool ledState = false;

void setup() {
  pinMode(ledPin, OUTPUT);
  Timer1.initialize(250000);
  Timer1.attachInterrupt(toggleLed);
}

void loop() {
  int sensorValue = analogRead(sensorPin);
  float voltage = sensorValue * 5.0 / 1023;
  float temperature = voltage * 100;

  if (temperature < 30) {
    Timer1.setPeriod(250000);
  } else {
    Timer1.setPeriod(500000);
  }
}

void toggleLed() {
  ledState = !ledState;
  digitalWrite(ledPin, ledState);
}
```