

//вероятно работающий код

const int btnPin = 6;

const int led1Pin = 11;

const int led2Pin = 10;

unsigned long led1Interval = 500; //[ms]

unsigned long led2Interval = 1000; //[ms]

unsigned long led1PrevMillis;

unsigned long led2PrevMillis;

int led1State;

int led2State;

int btnPrevState;

int ledActive;

void setup() {

  pinMode(btnPin, INPUT);

  pinMode(led1Pin, OUTPUT);

  pinMode(led2Pin, OUTPUT);

  unsigned long curMillis = millis();

  led1PrevMillis = curMillis;

  led2PrevMillis = curMillis;

  led1State = HIGH;

  led2State = HIGH;

  btnPrevState = digitalRead(btnPin);

  ledActive = 0;

}

void loop() {

  unsigned long curMillis = millis();

  if (ledActive) {

    if (curMillis - led1PrevMillis > led1Interval) {

      led1PrevMillis = curMillis;

      led1State = led1State == HIGH ? LOW : HIGH;

      digitalWrite(led1Pin, led1State);

    }

    if (curMillis - led2PrevMillis > led2Interval) {

      led2PrevMillis = curMillis;

      led2State = led2State == HIGH ? LOW : HIGH;

      digitalWrite(led2Pin, led2State);

    }

  }

  int btnState = digitalRead(btnPin);

  if (btnState != btnPrevState) {

    if (btnState == HIGH) {

      ledActive = !ledActive;

    }

    btnPrevState = btnState;

  }

}