INSTITUTO FEDERAL
Paraíba
Campus
Campina Grande

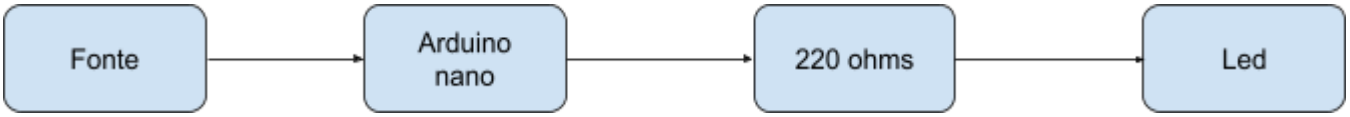
Disciplina: Sistemas Embarcados

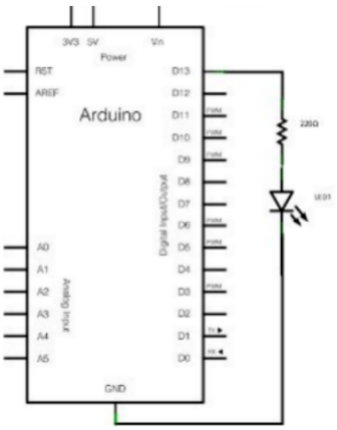
Professor: Alexandre Sales Vasconcelos

Aluno: José Ramon da Silva Bezerra

Atividade 5

Exemplo (a)





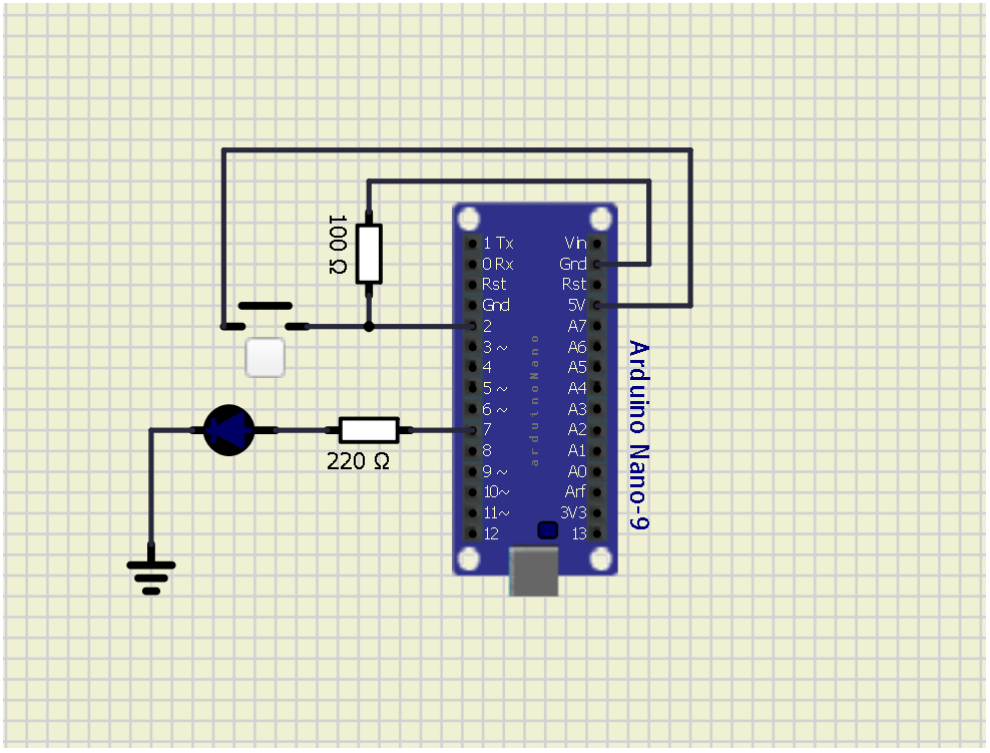

```
#include <Arduino.h>
// sem interrupção
int led 13;
void setup() {
    pinMode(led, OUTPUT);
}
```

```
void loop() {
    digitalWrite(led, 1);
    delay(3000);
    digitalWrite(led, 0);
    delay(15000);
}
```

```
#include <Arduino.h>
// com interrupção
int led 13;

void interrupcao(){
    digitalWrite(led, HIGH);
    delay(3000);
}
void setup() {
    pinMode(led, OUTPUT);
}
void loop() {
    digitalWrite(led, 1);
    delay(3000);
    digitalWrite(led, 0);
    delay(15000);
}
```

Exemplo (b)



```ino
#include <Arduino.h>

int pinoLed = 7;
int pinoBotao = 2;
int state = LOW;
int timeON = 2000;
int timeOFF = 1000;

void setup() {
    pinMode(pinoLed, OUTPUT);
    pinMode(pinoBotao, INPUT_PULLUP);
    attachInterrupt(digitalPinToInterrupt(pinoBotao), blink, FALLING);
}

void loop(){
    digitalWrite(pinoLed, HIGH);
    delay(timeON);
    digitalWrite(pinoLed, LOW);
    delay(timeOFF);
}

void blink() {
    state = !state;
    if (state == HIGH) {
        timeON = 2000;
        timeOFF = 1000;
    } else {
        timeON = 5000;
        timeOFF = 25000;
    }
}
```