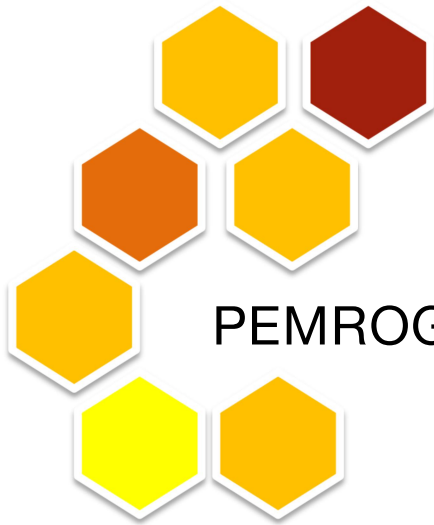


Bahan Ajar

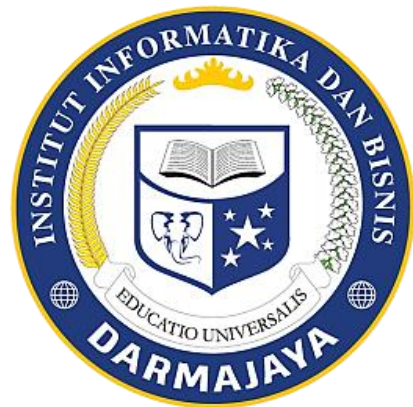


Modul

PEMROGRAMAN TERSTRUKTUR

Kode Matakuliah: SKO20411

C For Arduino



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**PROGRAM STUDI SISTEM KOMPUTER
FAKULTAS ILMU KOMPUTER
INSTITUT INFORMATIKA DAN BISNIS DARMAJAYA**

2022

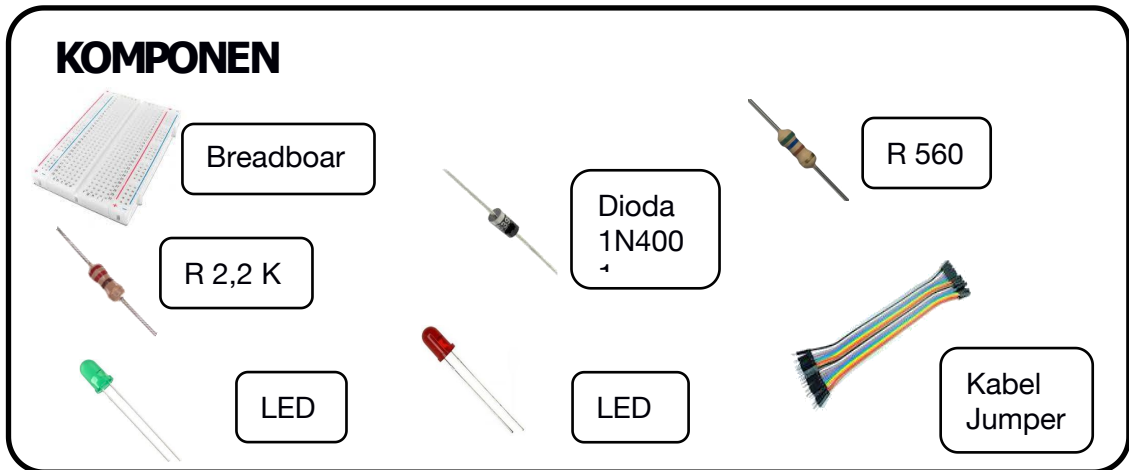
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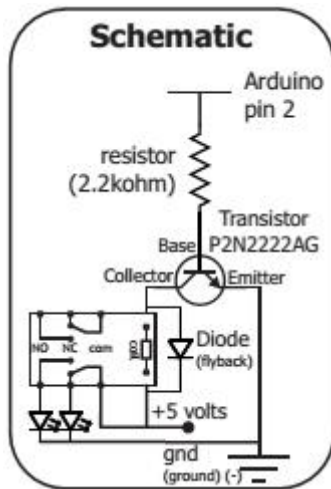
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Pointer and Array Multi Dimensi (LED)

KOMPONEN

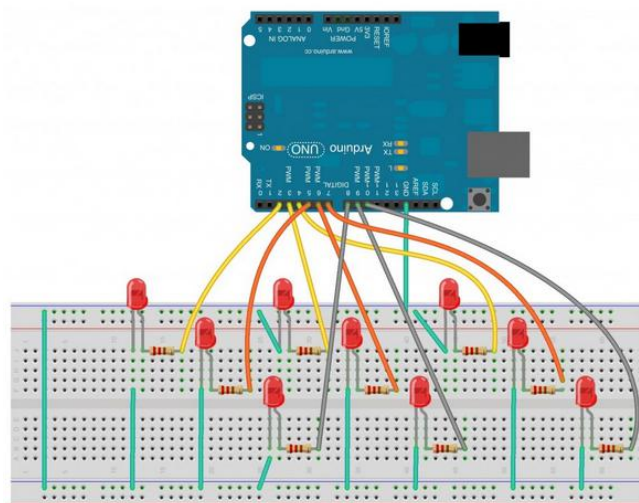


SKEMA



PERAKITAN

Hubungkan beberapa LED Ke Arduino pada pin papan breadboard dan pin ground seperti pada gambar.



KODE PROGRAM

```

//the matrix will hold the pin assignments for the led

int pinMatrix[3][3] = {

    {2, 3, 4 },
    {5, 6, 7 },
    {8, 9, 10 }

};

void setup() {

    //use a nested for loop to initialize all the pins
    for (int i = 0; i < 3; i++) {

        for (int j = 0; j < 3; j++) {

            pinMode(pinMatrix[i][j], OUTPUT);

        } //close for i

    } //close for j
} //close setup()

void loop() {

    //this nested for loop will turn each LED on and off in sequence
    for (int i = 0; i < 3; i++) {

        for (int j = 0; j < 3; j++) {

            digitalWrite(pinMatrix[i][j], HIGH);

            delay(100);

            digitalWrite(pinMatrix[i][j], LOW);

        } //close for i

    } //close for j

} //close loop()

```

LATIHAN

Lakukan memprogram nyala LED menggunakan fungsi ARRAY Multi Dimensi dalam bahasa C for Arduino.

LAPORAN HASIL PERCOBAAN: