**Laporan Praktikum**

**Pengenalan Komputer dan Software (KU0008)**

Tahap Persiapan Bersama

Institut Teknologi Sumatera

2023



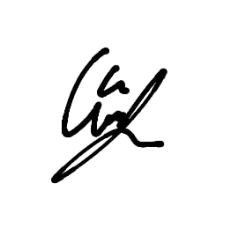
**Nama Modul :** Array

**Nama :** Muhammad Yusuf

**Nim :** 122140193

**Pernyataan Orisinalitas**

Dengan ini penulis bertanggung jawab sepenuhnya atas isi dari dokumen ini dan menyatakan bahwa seluruh isi dokumen ini adalah hasil karya penulis sendiri, dan setiap karya orang lain yang digunakan dalam dokumen ini telah diparafrase dan sudah disitasi sesuai dengan ketentuan yang ada.

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**Lampung selatan, 4 Mei 2023**

Muhammad Yusuf

122140193

**Daftar Isi**

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# 1. Latihan Input Array

## 1.1 Screenshot Code

// Muhammad Yusuf

// 122140193

#include <iostream>

using namespace std;

struct mahasiswa{ //menggunakan struct agar program lebih efisien

    string name, NIM, hobby;

    int age;

    float ipk;

};

int main(){

    mahasiswa datas[10];

    int searchByIndex;

    cout<<"===Input Session==="<<endl;

    for (int i = 0; i < 10; i++){

        cout<<"=============="<<endl;

        cout<<"Data ke- "<<i+1<<endl;

        cout <<"Nama: "; cin>>datas[i].name;

        cout<<"NIM: "; cin>>datas[i].NIM;

        cout<<"Umur: "; cin>>datas[i].age;

        cout<<"IPK: "; cin>>datas[i].ipk;

        cout<<"Hobi: "; cin>>datas[i].hobby;

    }

    cout<<endl;

    cout<<"Search by Index(0-10): "; cin>>searchByIndex;

    for(int i=0; i<10; i++){

        if(searchByIndex==i){

            cout<<"Pencarian dengan Index "<<searchByIndex<<" Ditemukan"<<endl;

            cout<<"Nama: "<<datas[searchByIndex].name<<endl;

            cout<<"NIM: "<<datas[searchByIndex].NIM<<endl;

            cout<<"Umur: "<<datas[searchByIndex].age<<endl;

            cout<<"IPK: "<<datas[searchByIndex].ipk<<endl;

            cout<<"Hobi: "<<datas[searchByIndex].hobby<<endl;

        }

    }

    return 0;

}

https://onlinegdb.com/GL3\_r1wg-

# 2. Latihan 1

## 2.1 Screenshoot Code

//Muhammad Yusuf

//122140193

#include <iostream>

using namespace std;

int main(){

    int i, countA = 0;;

    char Char[10];

    for (i = 0; i < 10; i++){

        cin >> Char[i];

    }

    cout<<"===Output==="<<endl;

    for (i = 0; i < 10; i++){

        cout << Char[i] << endl;

        if (Char[i] == 'A'){

            countA++;

        }

    }

    cout << "Banyaknya A: " << countA << endl;

    return 0;

}

https://onlinegdb.com/bvAWtzT4H6

# 3. Latihan 2

## 3.1 Screenshot Code

//Muhammad Yusuf

//122140193

#include <iostream>

using namespace std;

int main(){

    int i, min, idxmin;

    int Datas[10];

    for(i = 0; i < 10; i++){

        cin>>Datas[i];

    }

    min = Datas[0];

    for (i = 1; i < 10; i++){

        if (Datas[i] < min){

            min = Datas[i];

        }

    }

    idxmin = 0;

    for (i = 0; i < 10; i++){

        if (Datas[i] < Datas[idxmin]){

            idxmin = i;

        }

    }

    cout << "Nilai minimum: " << min << endl;

    cout << "Indeks nilai minimum: " << idxmin << endl;

    return 0;

}

https://onlinegdb.com/1N5l8Z55C

# 4. Latihan 3

## 4.1 Screenshot Code

//Muhammad Yusuf

//122140193

#include <iostream>

using namespace std;

int main(){

    int IX, X, i, frek;

    int TabInt[10];

    bool found;

    for(int i=0; i<10; i++){

        cin >> TabInt[i];

    }

    cout << "Data input: "; cin >> X;

    frek = 0;

    for (i = 0; i < 10; i++){

        if (TabInt[i] == X){

            frek = frek + 1;

        }

    }

    cout << "Frekuensi " << X << " = " << frek << endl;

    cout << "Masukkan nilai yang akan dicari : "; cin >> X;

    i = 10;

    found = false;

    while((i >= 0) && (!found)){

        if(TabInt[i]==X){

            found = true;

        }else{

            i--;

        }

    }

    IX = i;

    cout << "Nilai " << X << " berada di Index : " << IX << endl;

    return 0;

}

<https://onlinegdb.com/tkroaTrMx>

# 5. Latihan 4

## 5.1 Screenshot Code

//Muhammad Yusuf

//122140193

#include <iostream>

using namespace std;

int main(){

    int i, sum, Neff, X;

    int TI[100];

    cin >> X;

    i = 0;

    while ((X != -999) && (i < 100)){

        TI[i] = X;

        cin >> X;

        i++;

    }

    Neff = i;

    i = 0;

    sum = 0;

    while (i < Neff){

        sum = sum + TI[i];

        i++;

    }

    cout << "Banyaknya elemen = " << Neff << endl;

    cout << "Jumlah total elemen = " << sum << endl;

    return 0;

}

https://onlinegdb.com/hFB5DFwup