LAPORAN PRAKTIKUM
ALGORITMA PEMROGRAMAN

Disusun Oleh:

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PROGRAM STUDI INFORMATIKA

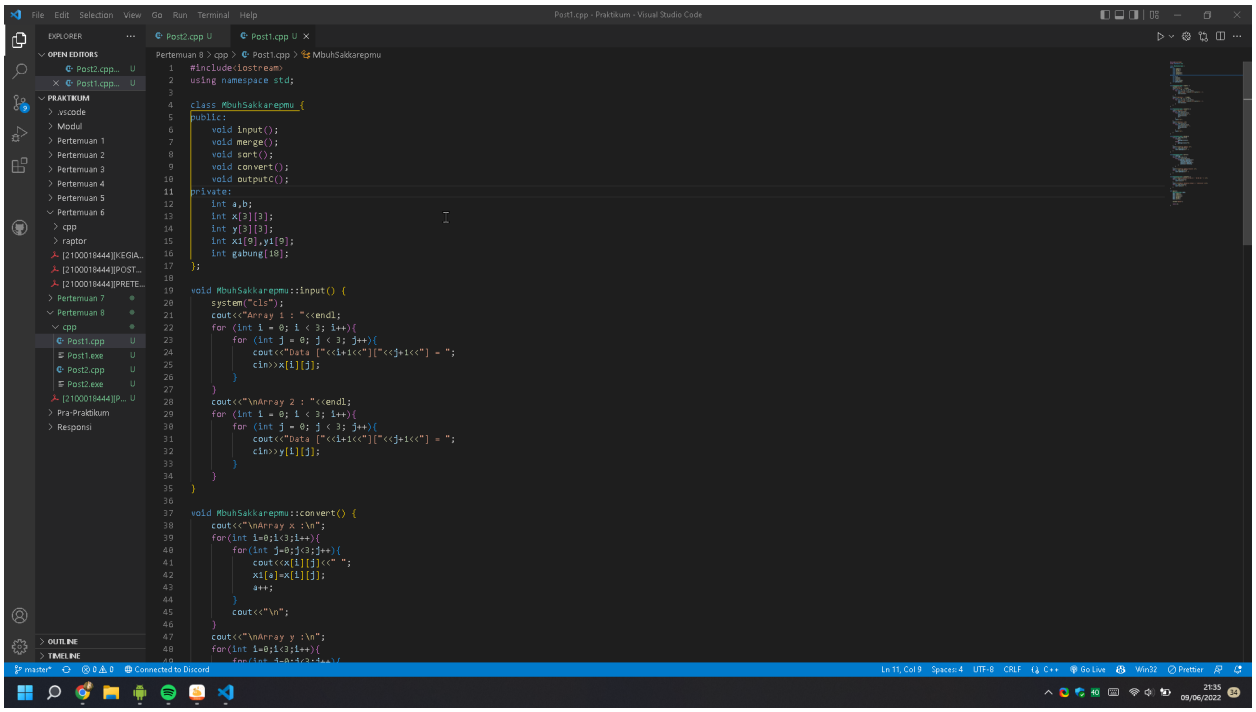
FAKULTAS TEKNOLOGI INDUSTRI

UNIVERSITAS AHMAD DAHLAN

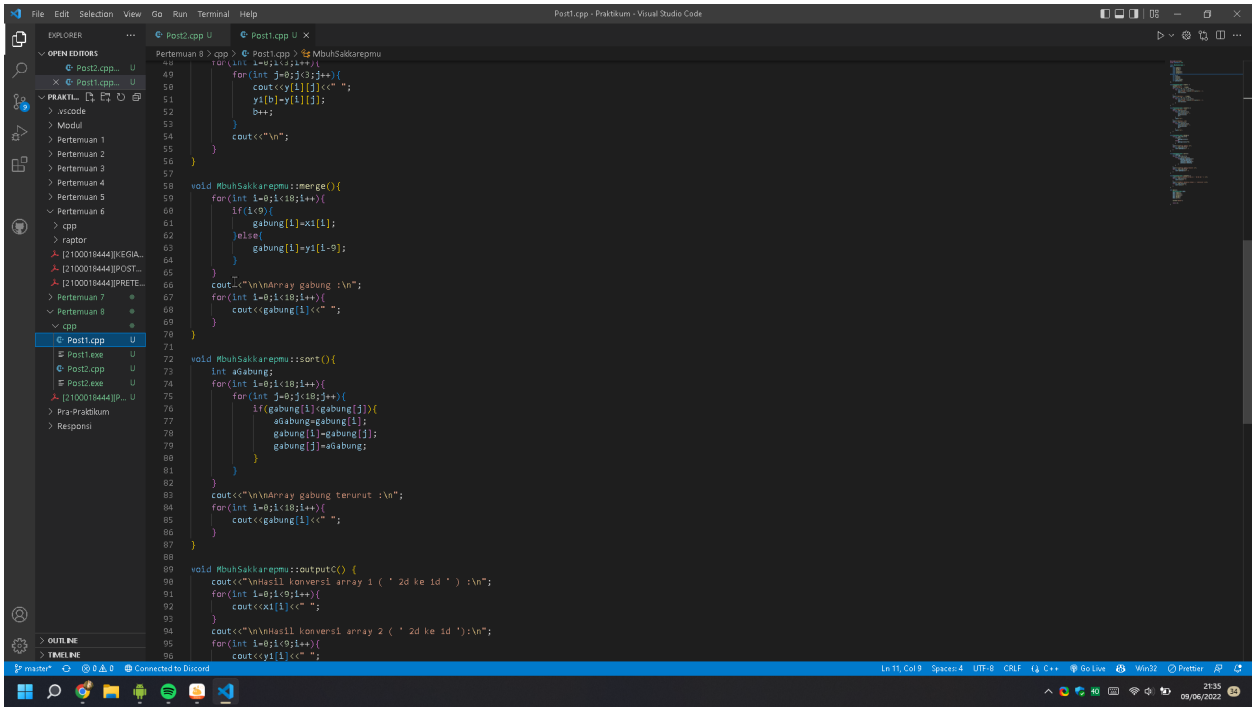
JUNI 2022

Posttest

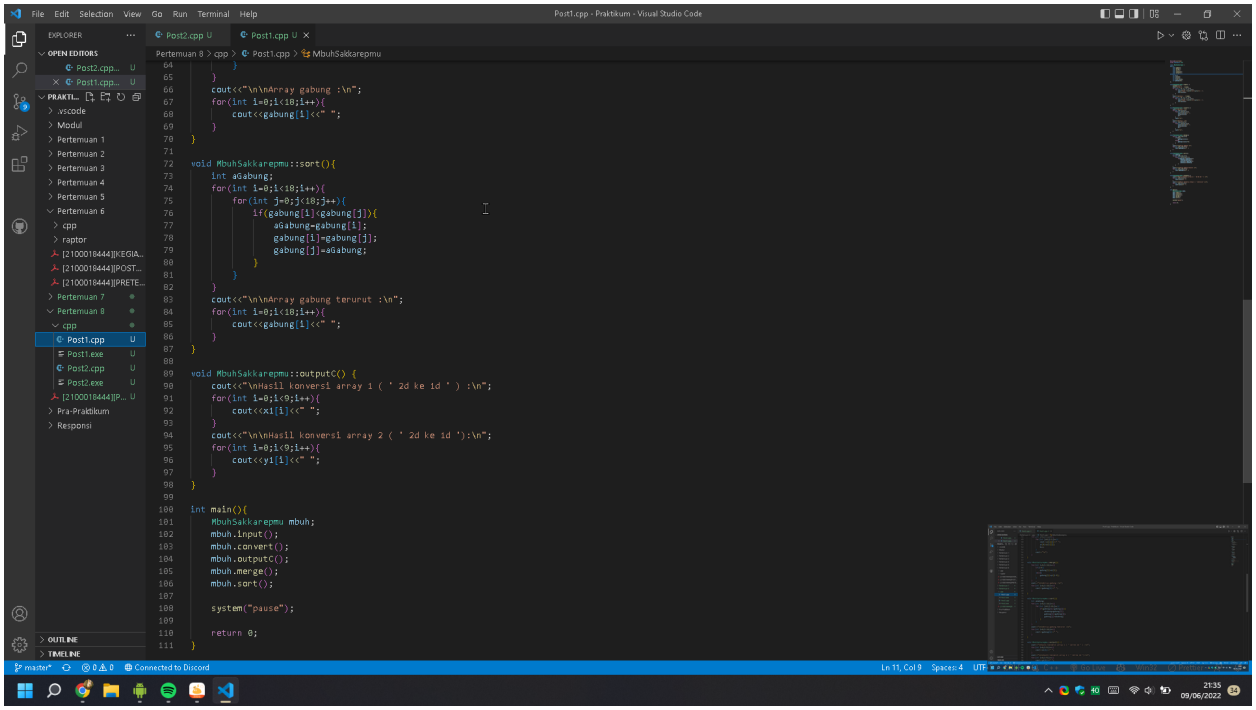
Menggabungkan 2 array 2D 3x3 lalu mengurutkan dari yang terkecil



```
#include<iostream>
using namespace std;

class MbuhSakkarepmu {
public:
    void input();
    void merge();
    void sort();
    void convert();
    void outputC();
private:
    int a,b;
    int x[3][3];
    int y[3][3];
    int x1[9],y1[9];
    int gabung[18];
};

void MbuhSakkarepmu::input() {
    system("cls");
    cout<<"Array 1 : "<<endl;
    for (int i = 0; i < 3; i++){
        for (int j = 0; j < 3; j++){
            cout<<"Data ["<<i+1<<"]["<<j+1<<"] = ";
            cin>>x[i][j];
        }
    }
    cout<<"\nArray 2 : "<<endl;
    for (int i = 0; i < 3; i++){
        for (int j = 0; j < 3; j++){
            cout<<"Data ["<<i+1<<"]["<<j+1<<"] = ";
            cin>>y[i][j];
        }
    }
}

void MbuhSakkarepmu::convert() {
    cout<<"\nArray x :\n";
    for(int i=0;i<3;i++){
        for(int j=0;j<3;j++){
            cout<<x[i][j]<<" ";
            x1[a]=x[i][j];
            a++;
        }
        cout<<"\n";
    }
    cout<<"\nArray y :\n";
    for(int i=0;i<3;i++){
```

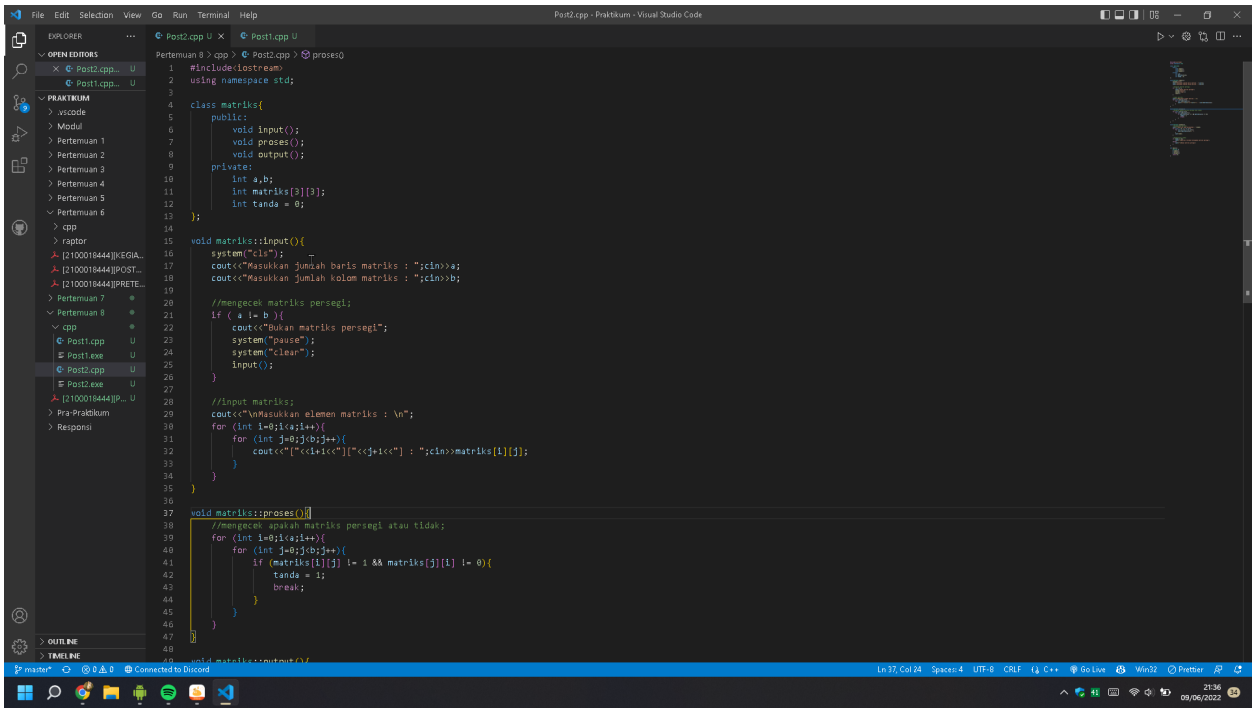


```
        for(int j=0;j<3;j++){
            cout<<y[i][j]<<" ";
            y1[b]=y[i][j];
            b++;
        }
        cout<<"\n";
    }
}

void MbuhSakkarepmu::merge(){
    for(int i=0;i<18;i++){
        if(i<9){
            gabung[i]=x1[i];
        }else{
            gabung[i]=y1[i-9];
        }
    }
    cout<<"\n\nArray gabung :\n";
    for(int i=0;i<18;i++){
        cout<<gabung[i]<<" ";
    }
}

void MbuhSakkarepmu::sort(){
    int aGabung;
    for(int i=0;i<18;i++){
        for(int j=0;j<18;j++){
            if(gabung[i]<gabung[j]){
                aGabung=gabung[i];
                gabung[i]=gabung[j];
                gabung[j]=aGabung;
            }
        }
    }
    cout<<"\n\nArray gabung terurut :\n";
    for(int i=0;i<18;i++){
        cout<<gabung[i]<<" ";
    }
}

void MbuhSakkarepmu::outputC() {
    cout<<"\nHasil konversi array 1 ( ' 2d ke 1d ' ) :\n";
    for(int i=0;i<9;i++){
        cout<<x1[i]<<" ";
    }
    cout<<"\n\nHasil konversi array 2 ( ' 2d ke 1d '):\n";
    for(int i=0;i<9;i++){
        cout<<y1[i]<<" ";
```

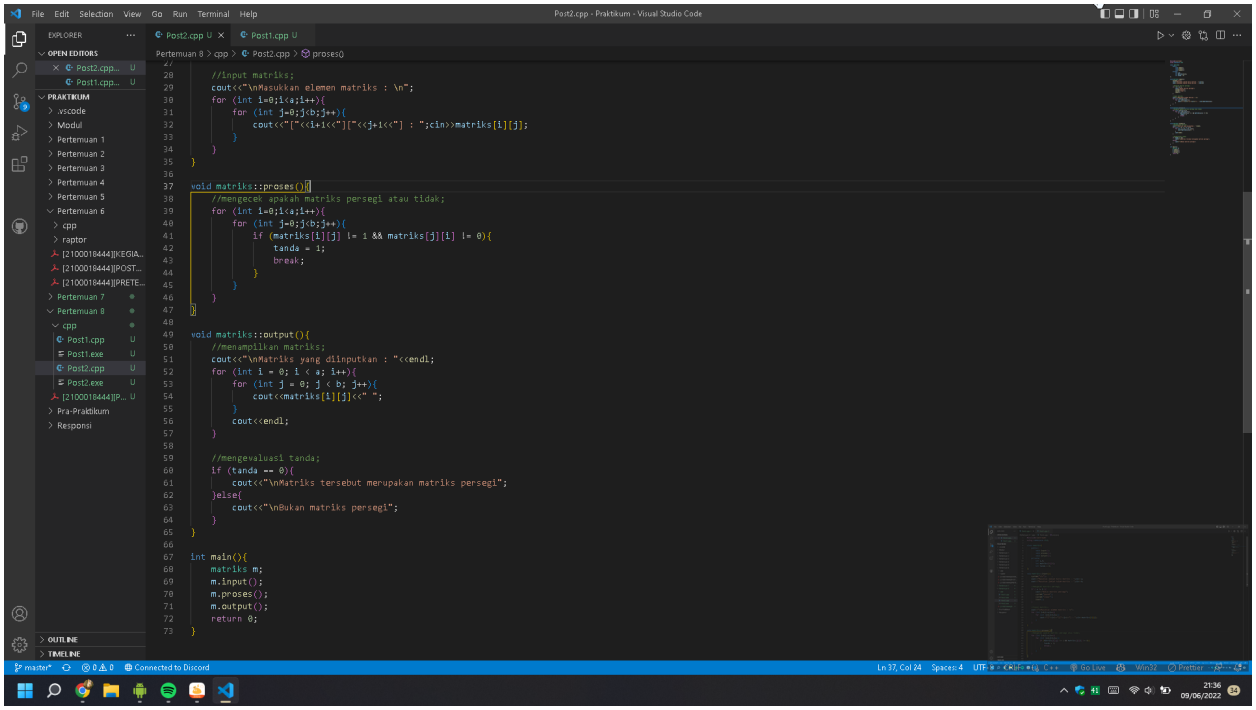


```
    }
}
cout<<"\n\nArray gabung :\n";
for(int i=0;i<10;i++){
    cout<<gabung[i]<<" ";
}
}

void MbuhSakkarepmu::sort(){
    int aGabung;
    for(int i=0;i<10;i++){
        for(int j=0;j<10;j++){
            if(gabung[i]<gabung[j]){
                aGabung=gabung[i];
                gabung[i]=gabung[j];
                gabung[j]=aGabung;
            }
        }
    }
    cout<<"\n\nArray gabung terurut :\n";
    for(int i=0;i<10;i++){
        cout<<gabung[i]<<" ";
    }
}

void MbuhSakkarepmu::outputC() {
    cout<<"\nHasil konversi array 1 ( ' 2d ke 1d ' ) :\n";
    for(int i=0;i<9;i++){
        cout<<x1[i]<<" ";
    }
    cout<<"\n\nHasil konversi array 2 ( ' 2d ke id '):\n";
    for(int i=0;i<9;i++){
        cout<<y1[i]<<" ";
    }
}

int main(){
    MbuhSakkarepmu mbuh;
    mbuh.input();
    mbuh.convert();
    mbuh.outputC();
    mbuh.merge();
    mbuh.sort();

    system("pause");

    return 0;
}
```

Mengevaluasi apakah matriks yang dimasukkan merupakan matriks persegi



```
#include<iostream>
using namespace std;

class matriks{
    public:
        void input();
        void proses();
        void output();
    private:
        int a,b;
        int matriks[3][3];
        int tanda = 0;
};

void matriks::input(){
    system("cls");
    cout<<"Masukkan jumlah baris matriks : ";cin>>a;
    cout<<"Masukkan jumlah kolom matriks : ";cin>>b;

    //mengecek matriks persegi;
    if ( a != b ){
        cout<<"Bukan matriks persegi";
        system("pause");
        system("clear");
        input();
    }

    //input matriks;
    cout<<"\nMasukkan elemen matriks : \n";
    for (int i=0;i<a;i++){
        for (int j=0;j<b;j++){
            cout<<"["<<i+1<<"]["<<j+1<<"] : ";cin>>matriks[i][j];
        }
    }
}

void matriks::proses(){
    //mengecek apakah matriks persegi atau tidak;
    for (int i=0;i<a;i++){
        for (int j=0;j<b;j++){
            if (matriks[i][j] != 1 && matriks[j][i] != 0){
                tanda = 1;
                break;
            }
        }
    }
}
```


File Edit Selection View Go Run Terminal Help
Post2.cpp - Praktikum - Visual Studio Code
EXPLORER
OPEN EDITORS
Post2.cpp... U
Post1.cpp... U
PRAKTIKUM
.vscode
Modul
Pertemuan 1
Pertemuan 2
Pertemuan 3
Pertemuan 4
Pertemuan 5
Pertemuan 6
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[2100018444]POST...
[2100018444]PRETE...
Pertemuan 7
Pertemuan 8
cpp
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Post1.exe U
Post2.cpp U
Post2.exe U
[2100018444]P... U
Pra-Praktikum
Responsi
OUTLINE
TIMELINE
Post2.cpp U
Post1.cpp U
Pertemuan 8 > cpp > Post2.cpp > proses()
//input matriks;
cout<<"\nMasukkan elemen matriks : \n";
for (int i=0;i<a;i++){
for (int j=0;j<b;j++){
cout<<"["<<i+1<<"]["<<j+1<<"] : ";cin>>matriks[i][j];
}
}
}
void matriks::proses(){
//mengecek apakah matriks persegi atau tidak;
for (int i=0;i<a;i++){
for (int j=0;j<b;j++){
if (matriks[i][j] != 1 && matriks[j][i] != 0){
tanda = 1;
break;
}
}
}
}
void matriks::output(){
//menampilkan matriks;
cout<<"\nMatriks yang diinputkan : "<<endl;
for (int i = 0; i < a; i++){
for (int j = 0; j < b; j++){
cout<<matriks[i][j]<<" ";
}
cout<<endl;
}
//mengevaluasi tanda;
if (tanda == 0){
cout<<"\nMatriks tersebut merupakan matriks persegi";
}else{
cout<<"\nBukan matriks persegi";
}
}
int main(){
matriks m;
m.input();
m.proses();
m.output();
return 0;
}
master*
Connected to Discord
Ln 37, Col 24
Spaces: 4
UTF-8
Go Live
Win32
Prettier
21:36
09/06/2022