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Modul 6

Menggunakan Tools Visual Studio Code

1. Analis program di bawah ini :

```cpp
#include <iostream>

using namespace std;

int matriks [4][4]; int i, j;

int main ()

{

    cout<< "Isi data matriks" << endl;

    for(i=0; i<j; i++)

{

for (j=0; j<i; j++)

{

cout<< "Matriks ["<<i<<"]["<<j<<"]:"; cin>>matriks [i][j];

}

}

cout<<"Hasil data inputan matriks 4*4 :"<<endl;

for(i=0; i<4; i++)

{

for (j=0; j<4; j++)

{

cout<<matriks [i][j]<<" ";

}

cout<<endl;

}

}
```

a. Lakukan proses Kompilasi

```
#include <iostream>
```

```
using namespace std;
int matriks [4][4]; int i, j;
int main ()
{
    cout<< "Isi data matriks" << endl;
    for(i=0; i<j; i++)
{
for (j=0; j<i; j++)
{
cout<< "Matriks ["<<i<<"]["<<j<<"]:"; cin>>matriks [i][j];
}
}
cout<<"Hasil data inputan matriks 4*4 :"<<endl;
for(i=0; i<4; i++)
{
for (j=0; j<4; j++)
{
cout<<matriks [i][j]<<" ";
}
cout<<endl;
}
}
```

b. Jalankan program diatas dan amati hasilnya

```
#include <iostream>
using namespace std;
int matriks [4][4]; int i, j;
int main ()
{
    cout<< "Isi data matriks" << endl;
    for(i=0; i<j; i++)
{
for (j=0; j<i; j++)
{
cout<< "Matriks ["<<i<<"]["<<j<<"]:"; cin>>matriks [i][j];
}
}
cout<<"Hasil data inputan matriks 4*4 :"<<endl;
for(i=0; i<4; i++)
{
for (j=0; j<4; j++)
{
cout<<matriks [i][j]<<" ";
}
cout<<endl;
}
}
```

menggunakan i dan j dalam kondisi loop sebelum mereka diinisialisasi, yang dapat menyebabkan perilaku yang tidak terdefinisi.

c. Ubahlah agar matrik dapat diisi secara dinamis

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

int main ()
{
    int n, m;
    cout << "Masukkan jumlah baris matriks: ";
    cin >> n;
    cout << "Masukkan jumlah kolom matriks: ";
    cin >> m;

    int matriks[n][m];
    int i, j;

    cout << "Isi data matriks" << endl;
    for(i=0; i<n; i++)
    {
        for (j=0; j<m; j++)
        {
            cout << "Matriks [" << i << "][" << j << "]: ";
            cin >> matriks[i][j];
        }
    }

    cout << "Hasil data inputan matriks " << n << "*" << m << " :" << endl;
    for(i=0; i<n; i++)
    {
        for (j=0; j<m; j++)
        {
            cout << matriks[i][j] << " ";
        }
        cout << endl;
    }
}
```

```
    return 0;
}
```

3. Buatlah program menggunakan array dimensi 3 dalam membuat tampilan 3 dimensi berbentuk benda

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

int main() {
    int x, y, z;
    int cube[10][10][10] = {
        {
            {0,0,0,0,0,0,0,0,0,0},
            {0,0,0,1,1,1,1,1,1,1},
            {0,0,1,1,1,1,1,1,1,2},
            {0,1,1,1,1,1,1,1,0,2},
            {1,1,1,1,1,1,1,0,0,2},
            {2,0,0,0,0,0,2,0,0,2},
            {2,0,0,0,0,0,2,0,0,2},
            {2,0,0,0,0,0,2,0,2,0},
            {2,3,3,3,3,3,2,2,0,0},
            {0,0,0,0,0,0,0,0,0,0}
        }
    };

    for (x = 0; x < 10; x++) {
        for (y = 0; y < 10; y++) {
            for (z = 0; z < 10; z++) {

                if (cube[x][y][z] == 0)
                    cout << " ";

                else if (cube[x][y][z] == 1)
                    cout << "-";

                else if (cube[x][y][z] == 2)
```

```cpp
                    cout << "/";
                else if (cube[x][y][z] == 3)
                    cout << "_";
                else
                    cout << '\x20';
            }
            cout << endl;
        }
        cout << endl;
    }

    return 0;
}
```
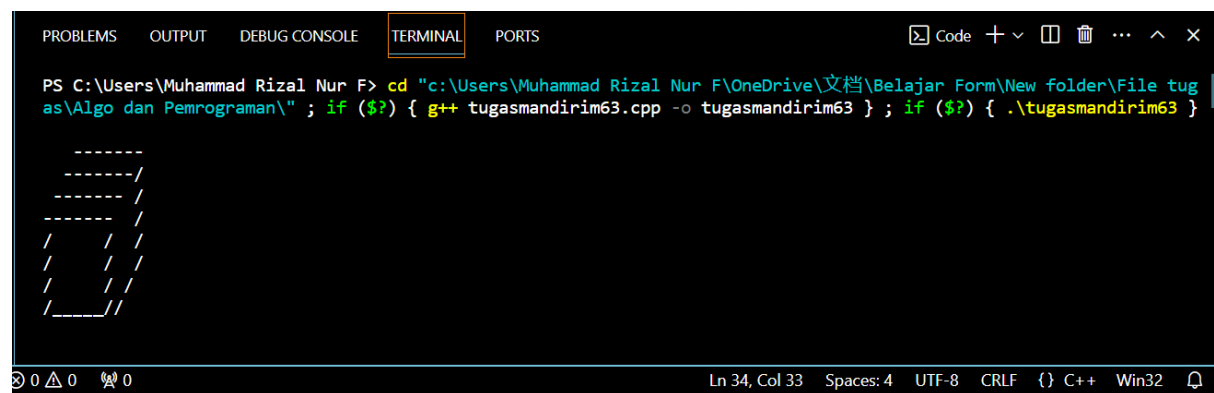
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS   ⊳ Code + ∨ ⊡ 🗑 … ∧ ✕

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