TUGAS 6 ALPRO 2

Nama : Robby Izhar Ramadhana
NIM : 17111255
Kelas : TIFK 17 A

1. Perkalian Matriks A dan Matriks B

```cpp
#include <iostream>
using namespace std;
int main()
{

    // Deklarasi varibel
    int A[10][10], B[10][10], C[10][10], D[10][10];
    cout << "\nRobby Izhar Ramadhana";
    cout << "\n17111255";
    cout << endl
        << endl;

    A[0][0] = 2;
    A[0][1] = 3;
    A[0][2] = 6;
    A[1][0] = 4;
    A[1][1] = 7;
    A[1][2] = 8;

    // Inisialisasi matriks B
    B[0][0] = 3;
    B[0][1] = 5;
    B[1][0] = 2;
    B[1][1] = 4;
    B[2][0] = 8;
    B[2][1] = 6;

    // Proses perkalian matriks A dan B
    C[0][0] = A[0][0] * B[0][0] + A[0][1] * B[1][0] + A[0][2] * B[2][0];
    C[0][1] = A[0][0] * B[0][1] + A[0][1] * B[1][1] + A[0][2] * B[2][1];
    C[1][0] = A[1][0] * B[0][0] + A[1][1] * B[1][0] + A[1][2] * B[2][0];
    C[1][1] = A[1][0] * B[0][1] + A[1][1] * B[1][1] + A[1][2] * B[2][1];

    // Menampilkan matriks A
    cout << "\nMatriks A :\n"
        << endl;
    cout << A[0][0] << "\t" << A[0][1] << "\t" << A[0][2] << endl;
    cout << A[1][0] << "\t" << A[1][1] << "\t" << A[1][2] << endl;

    // Menampilkan matriks B
    cout << "\nMatriks B :\n"
        << endl;
    cout << B[0][0] << "\t" << B[0][1] << endl;
    cout << B[1][0] << "\t" << B[1][1] << endl;
```

```cpp
    cout << B[2][0] << "\t" << B[2][1] << endl;

    // menampilkan hasil kali matriks A dan B
    cout << "\nHasil Matriks A x Matriks B :\n"
        << endl;
    cout << C[0][0] << "\t" << C[0][1] << endl;
    cout << C[1][0] << "\t" << C[1][1] << endl;
    cout << endl;

    return 0;
}
```

2. Program Input Mahasiswa

```cpp
#include <iostream>
#include <string>

using namespace std;

int main()
{
    string nama[5];
    int nilai_angka[5];
    string nilai_huruf;
    string kelas[5];

    cout << "Masukan Nama Mahasiswa : " << endl
        << endl;
    int x = 1;
    for (int i = 0; i < 5; i++)
    {
        cout << "\nMasukan Nama ke-" << x << "\n";
        cin >> nama[i];

        cout << "\nMasukan Kelas : "
            << "\n";
        cin >> kelas[i];

        cout << "\nMasukan Nilai : "
            << "\n";
        cin >> nilai_angka[i];

        x++;
    }

    cout << "\n";
    cout << "DATA MAHASISWA" << endl;

    int y = 1;
    for (int i = 0; i < 5; i++)
    {
        if (nilai_angka[i] >= 75)
```

```cpp
        {
            nilai_huruf = "A";
        }
        else if (nilai_angka[i] >= 60 && nilai_angka[i] < 75)
        {
            nilai_huruf = "B";
        }
        else if (nilai_angka[i] >= 40 && nilai_angka[i] < 60)
        {
            nilai_huruf = "C";
        }
        else if (nilai_angka[i] >= 20 && nilai_angka[i] < 40)
        {
            nilai_huruf = "D";
        }
        else if (nilai_angka[i] >= 0 && nilai_angka[i] < 20)
        {
            nilai_huruf = "E";
        }

        cout << "No." << y << "   Nama = " << nama[i] << "   Kelas = " << kelas[i] << "   Nilai Angka
= " << nilai_angka[i] << "   Nilai Huruf = " << nilai_huruf << endl;
        cout << "\n";
        y++;
    }
}
```