**STRUKTUR DATA**

(Tugas2)

****

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Dikumpulkan tanggal :

6 Maret 2022

UNIVERSITAS PADJADJARAN

FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

Program Studi INFORMATIKA

2022

/\*  Nama Program    : Quiz1

    Nama            : Prames Ray Lapian

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    Tanggal Buat    : 14 Mar 2022

    Deskripsi       : Cari jumlah baris dan jumlah kolom dari suatu matriks

    Lokasi File     : C:\Users\prame\Documents\PRAMES\PERKULIAHAN\SEMESTER 2\Struktur Data\TUGAS

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

#include <iostream>

using namespace std;

typedef int matriks[10][10];

void banyakData(int& nBaris, int& nKolom)

{

    cout << "Banyak baris : "; cin >> nBaris;

    cout << "Banyak kolom : "; cin >> nKolom;

}

void isiMatriks(int nBaris, int nKolom, matriks x1)

{

    if (nBaris > 0 && nKolom > 0)

    {

        cout << "\nMasukkan isi matriks\n";

        for (int i = 0; i < nBaris; i++)

        {

            for (int j = 0 ; j < nKolom ; j++)

            {

                cout << "Baris " << i+1 << ", Kolom " << j+1 << " = "; cin >> x1[i][j];

            }

            cout << endl;

        }

    }

}

void cetakMatriks(int nBaris, int nKolom, matriks x1)

{

    cout << "=============================\n"

         << "Matriks:\n";

    for (int i = 0; i < nBaris; i++)

    {

        for (int j = 0; j < nKolom; j++)

        {

            cout << x1[i][j] << "\t";

        }

        cout << endl;

    }

}

void cariJumlahKolom(int nBaris, int nKolom, matriks x1)

{

    for (int j = 0; j < nKolom; j++)

    {

        int jb[j] = 0;

        for (int i = 0; i < nBaris; i++)

        {

            jb[i] += x1[i][j];

        }

    }

}

void cariJumlahBaris(int nBaris, int nKolom, matriks x1)

{

    int jb[10];

    for (int i = 0; i < nKolom; i++)

    {

        jb[i] = 0;

        for (int j = 0; j < nBaris; j++)

        {

            jb[j] += x1[i][j];

        }

    }

}

int main()

{

    matriks x1;

    int nBaris, nKolom;

    banyakData(nBaris, nKolom);

    isiMatriks(nBaris, nKolom,  x1);

    cetakMatriks(nBaris, nKolom,  x1);

    cariJumlahBaris(nBaris, nKolom,  x1);

    cariJumlahKolom(nBaris, nKolom,  x1);

}

Output:

/\*  Nama Program    : Quiz1\_2

    Nama            : Prames Ray Lapian

    NPM             : 140810210059

    Tanggal Buat    : 14 Mar 2022

    Deskripsi       : Membuat list baru dan mencari 4 cara meng-outputkan suatu pointer

    Lokasi File     : C:\Users\prame\Documents\PRAMES\PERKULIAHAN\SEMESTER 2\Struktur Data\TUGAS

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

#include <iostream>

using namespace std;

struct ElmtList

{

    char info;

    ElmtList\* next;

};

typedef ElmtList\* pointerToElmtList;

typedef pointerToElmtList List;

main()

{

    pointerToElmtList p1, p2, p3, p4;

    List First;

    cout <<"Input : "<< endl;

    p1 = new ElmtList;

    cout << "info p1 = "; cin >> p1 -> info;

    p1 -> next = NULL;

    p2 = new ElmtList;

    cout << "info p2 = "; cin >> p2 -> info;

    p2 -> next = NULL;

    p3 = new ElmtList;

    cout << "info p3 = "; cin >> p3 -> info;

    p3 -> next = NULL;

    p4 = new ElmtList;

    cout << "info p4 = "; cin >> p4 -> info;

    p4 -> next = NULL;

    p1 -> next = p2;

    p2 -> next = p3;

    p3 -> next = p4;

    First = p1;

    cout << "Output : " << endl;

    cout << "info p1 : " << p1 -> info << endl;

    cout << "info p2 : " << p2 -> info << endl;

    cout << "info p3 : " << p3 -> info << endl;

    cout << "info p4 #1: " << p4 -> info << endl;

    cout << "info p4 #2: " << p3 -> next -> info << endl;

    cout << "info p4 #3: " << p2 -> next -> next -> info << endl;

    cout << "info p4 #4: " << p1 -> next -> next -> next -> info << endl;

}

Output:

