

Kelompok 1

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```
#include<iostream>
#include<conio.h>
#include<stdio.h>
using namespace std;

struct STACK{
    string matkul[100];
    int sks[100];
    char bobot[100];
    int total[100];
    int atas;
};
STACK tumpuk;

int main(){
    int pilStack,i,newSks,newTotal,pilMakul;
    char newBobot;
    string newMatkul;
    tumpuk.atas=-1;
    do{
        system("cls");
        cout<<"===== "<<endl;
        cout<<"| Program Input Data Mahasiswa | "<<endl;
        cout<<"===== "<<endl;
        cout<<"| 1. Matakuliah Baru          | "<<endl;
        cout<<"| 2. Data Matakuliah            | "<<endl;
        cout<<"| 3. Update Matakuliah          | "<<endl;
        cout<<"| 4. Hapus Matakuliah          | "<<endl;
        cout<<"| 5. Keluar                    | "<<endl;
        cout<<"===== "<<endl;
        cout<<"Masukan Pilihan : ";cin>>pilStack;
        switch(toupper(pilStack)){
            case 1 : system("cls");{
                if(tumpuk.atas==100-1){
                    cout<<"Data Penuh";
                    getch();
                }else{
                    cout<<"Nama matakuliah \t: ";cin>>newMatkul;
                    cout<<"SKS\t\t\t: ";cin>>newSks;
                    cout<<"Bobot (A/B/C/D/E) : ";cin>>newBobot;
                    switch(newBobot){
```

```

        case 'a':
        case 'A':
            newTotal = newSks*4;
            newBobot='A';
            break;
        case 'b':
        case 'B':
            newTotal = newSks*3;
            newBobot='B';
            break;
        case 'c':
        case 'C':
            newTotal = newSks*2;
            newBobot='C';
            break;
        case 'd':
        case 'D':
            newTotal = newSks*1;
            newBobot='D';
            break;
        case 'e':
        case 'E':
            newTotal = newSks*0;
            newBobot='E';
            break;
        default :
            break;
    }
    tumpuk.atas++;

    tumpuk.matkul[tumpuk.atas]=newMatkul;
    tumpuk.sks[tumpuk.atas]=newSks;
    tumpuk.bobot[tumpuk.atas]=newBobot;
    tumpuk.total[tumpuk.atas]=newTotal;
    cout<<"Matakuliah telah diMasukan....";
    getch();
    }
    break;
}
case 2 : system("cls");{
    if(tumpuk.atas==-1){
        cout<<"Tumpukan kosong!";
    }else{
        cout<<"Matakuliah yang diambil :\n\n";

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

```

```

cout<<" | Matakuliah\t\t | \tSKS\t | Bobot\t | Total\t
|\n";

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

for(i=0;i<=tumpuk.atas;i++){
    cout<<" | "<<tumpuk.matkul[i]<<"\t\t |
\t"<<tumpuk.sks[i]<<"\t | "<<tumpuk.bobot[i]<<"\t\t | \t"<<tumpuk.total[i]<<"\t |\n";
}

cout<<"=====
=====\\nTekan 'Enter' untuk kembali....";
}
getch();
break;
}
case 3 :system("cls");{
    if(tumpuk.atas==1){
        cout<<"Tumpukan kosong!";
        getch();
    }else{
        cout<<"Matakuliah yang diambil :\\n\\n";

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

        cout<<" | No.\t | Matakuliah\t\t | \tSKS\t | Bobot\t |
Total\t |\n";

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

        for(i=0;i<=tumpuk.atas;i++){
            cout<<" | "<<(i+1)<<"\t |
"<<tumpuk.matkul[i]<<"\t\t | \t"<<tumpuk.sks[i]<<"\t | "<<tumpuk.bobot[i]<<"\t\t |
\t"<<tumpuk.total[i]<<"\t |\n";
        }

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

        cout<<"Masukan Nomor Matakuliah ('0' untuk
kembali) : ";cin>>pilMakul;

        if(pilMakul==0){
            break;
        }else{
            system("cls");
            if(tumpuk.matkul[pilMakul-1]!=""){
                char save;

```

```
"<<tumpuk.matkul[pilMakul-1]<<endl;
```

```
";cin>>newBobot;
```

```
";cin>>save;
```

```
1]=newBobot;
```

```
1]=newTotal;
```

```
diUpdate....";
```

```
cout<<"Nama matakuliah :
```

```
cout<<"SKS : ";cin>>newSks;
```

```
cout<<"Bobot (A/B/C/D/E) :
```

```
switch(newBobot){
```

```
    case 'a':
```

```
    case 'A':
```

```
        newTotal = newSks*4;
```

```
        newBobot='A';
```

```
        break;
```

```
    case 'b':
```

```
    case 'B':
```

```
        newTotal = newSks*3;
```

```
        newBobot='B';
```

```
        break;
```

```
    case 'c':
```

```
    case 'C':
```

```
        newTotal = newSks*2;
```

```
        newBobot='C';
```

```
        break;
```

```
    case 'd':
```

```
    case 'D':
```

```
        newTotal = newSks*1;
```

```
        newBobot='D';
```

```
        break;
```

```
    case 'e':
```

```
    case 'E':
```

```
        newTotal = newSks*0;
```

```
        newBobot='E';
```

```
        break;
```

```
    default :
```

```
        break;
```

```
}
```

```
cout<<"Simpan data baru ? (Y/n) :
```

```
if(save=='Y' || save=='y'){
```

```
    system("cls");
```

```
    tumpuk.sks[pilMakul-1]=newSks;
```

```
    tumpuk.bobot[pilMakul-
```

```
    tumpuk.total[pilMakul-
```

```
    cout<<"Matakuliah telah
```

```
    getch();
```

```
}else{
```

```

                                break;
                            }
                        }else{
                            cout<<"Data tidak ditemukan...";
                            getch();
                        }
                    }
                }
                break;
            }
            case 4 : system("cls");{
                if(tumpuk.atas==1){
                    cout<<"Matakuliah kosong!";
                    getch();
                }else{
                    cout<<"Matakuliah yang dihapus =
"<<tumpuk.matkul[tumpuk.atas];
                    tumpuk.atas--;
                    getch();
                }
                break;
            }
            case 5 :{
                return 0;
                break;
            }
            default : system("cls");{
                cout<<"Pilihan tidak ditemukan!";
                getch();
                break;
            }
        }
    }while(pilStack!=5);
}

```

```
C:\Users\lenovo\Downloads\tugas egy.exe
Matakuliah yang diambil :
=====
| Matakuliah | SKS | Bobot | Total |
=====
| Kalkulus   | 2   | B     | 6     |
| StrukturData | 3   | A     | 12    |
| Algoritma  | 2   | C     | 4     |
=====
Tekan 'Enter' untuk kembali....
```