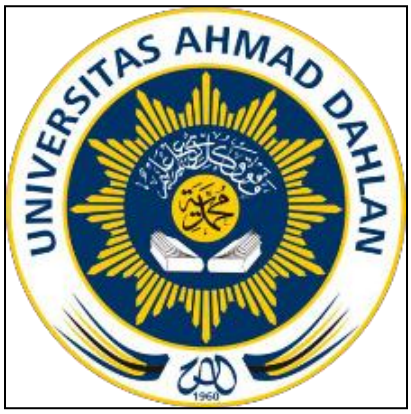
LAPORAN PRAKTEK

ALGORITMA PEMROGRAMAN



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UNIVERSITAS AHMAD DAHLAN

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prak.h

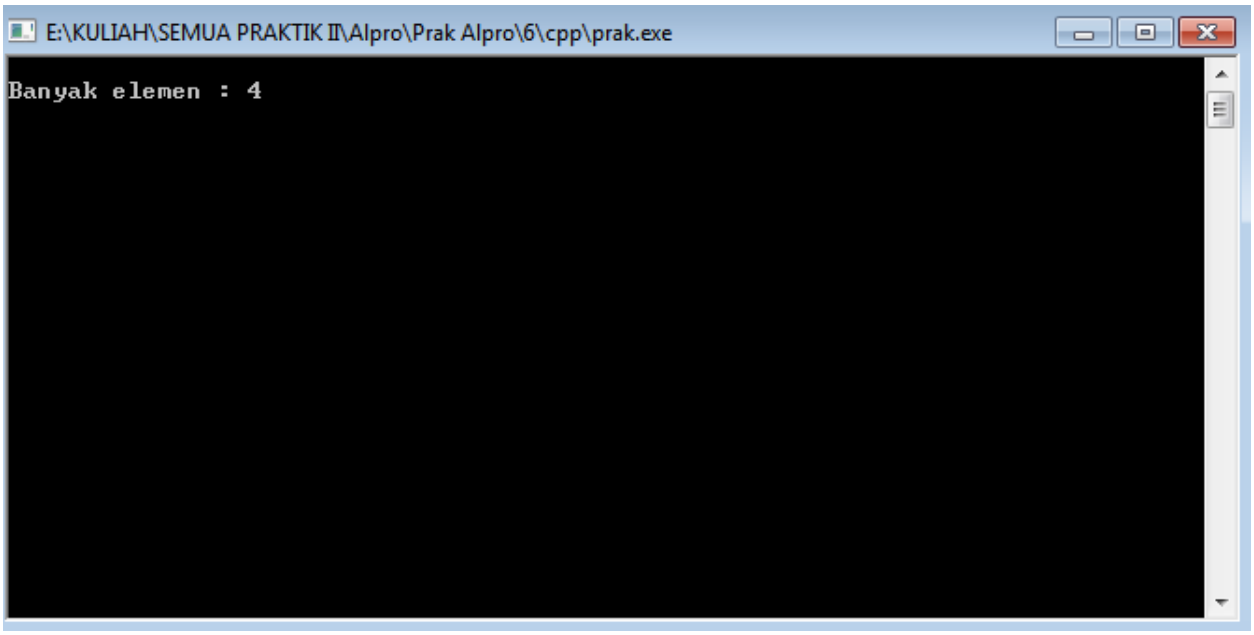
```
#include <iostream>
#include <iomanip>
#include <conio.h>
using namespace std;
class Vektor{
    friend ostream&operator<<(ostream&,Vektor&);
    friend istream&operator>>(istream&,Vektor&);
public:
    Vektor();
    void penjumlahan_vektor(const Vektor&,const Vektor&);
    void perkalian_vektor(float,const Vektor&);
    void beri_nilaiBanyak(int);
private:
    int elemen[100];
    int banyak;
};

Vektor::Vektor(){
    banyak = 3;
    for (int i = 0; i<banyak;i++)
    elemen[i]=0;
}
void Vektor::beri_nilaiBanyak(int i){
    banyak = i;
}
istream& operator>>(istream& in, Vektor&A){
    cout<<"\nBanyak elemen : ";
    in>>A.banyak;
    cout<<"Masukkan data vektor\n";
    for(int i = 0; i < A.banyak;i++){
        cout<<"Data ["<<i+1<<"] : ";
        cin>>A.elemen[i];
    }
    return in;
```

```
}
ostream& operator<<(ostream& out,Vektor& A){
    cout<<endl;
    for (int i = 0;i < A.banyak; i++){
        cout<<"s["<<i+1<<"] = "<<setw(5)<<A.elemen[i]<<"\n";
    }
    return out;
}
void Vektor::penjumlahan_vektor(const Vektor& A,const Vektor&
    if (A.banyak  > B.banyak){
        banyak = A.banyak;
    }
    else{
        banyak = B.banyak;
    }
    for (int i = 0;i<banyak;i++){
        elemen[i] = A.elemen[i] + B.elemen[i];
    }
}
void Vektor::perkalian_vektor(float k,const Vektor&A){
    banyak = A.banyak;
    for(int i = 0; i <banyak;i++){
        elemen[i]=k*A.elemen[i];
    }
}
```

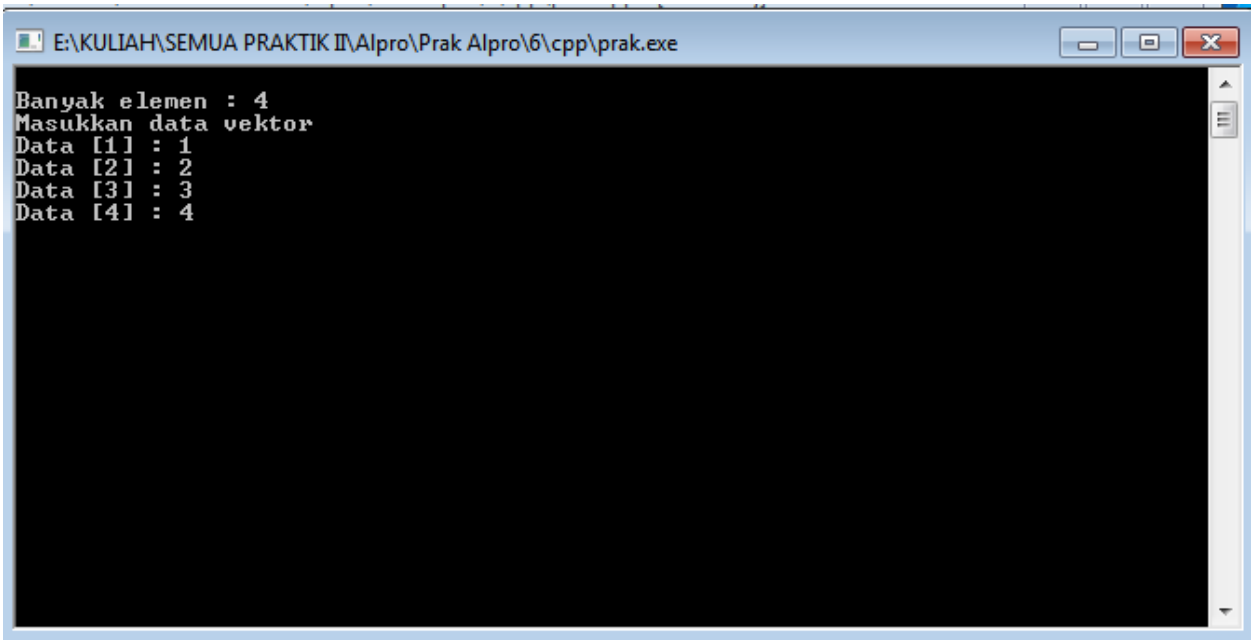
Membuat prak.h

```
#include "prak.h"
main(){
    Vektor x,y,z;
    cin>>x;
    cout<<x;
    cin>>y;
    cout<<y;
    z.penjumlahan_vektor(x,y);
    cout<<"\nHasil penjumlahan 2 vektor\n"<<z;
    z.perkalian_vektor(3,x);
    cout<<"\nHasil perkalian skalar dengan vektor\n"<<z;
    getch();
}
```

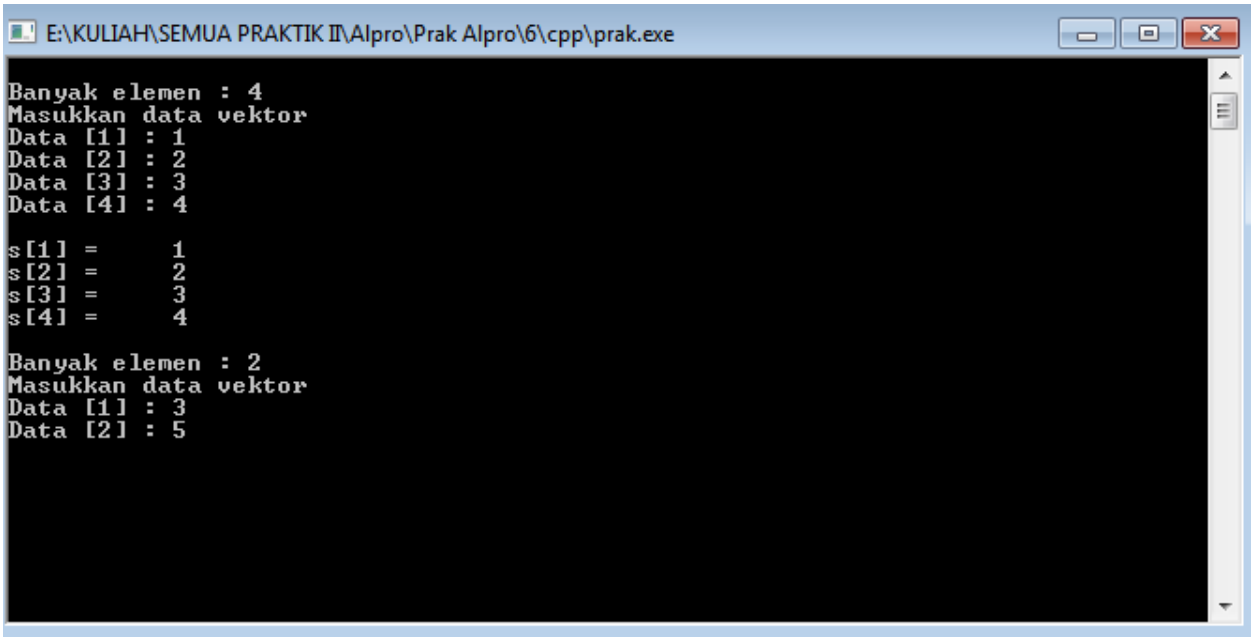
Membuat main.cpp



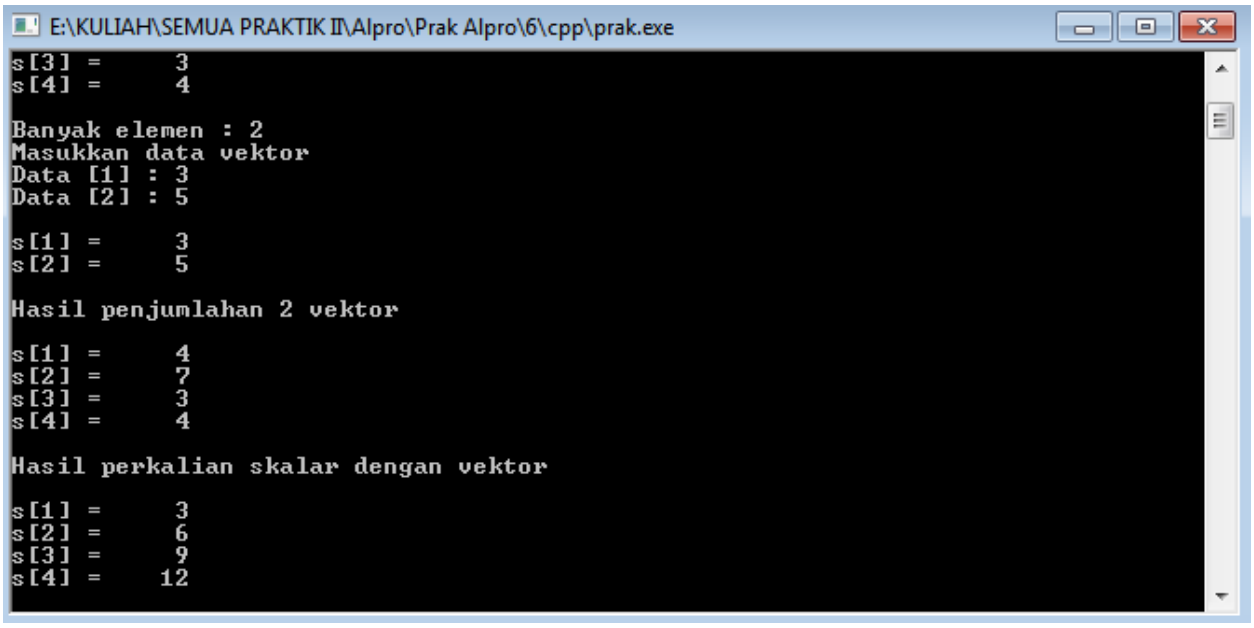
Memasukkan banyak elemen



Mengisi nilai elemen



Hasil elemen 1 kemudian memasukkan nilai ke 2



Hasil penjumlahan dan perkalian

Link repo:

https://github.com/142Eko/Prak-alpro/tree/master/6/Kode